

YEDİTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES

**THE RELATIONSHIP BETWEEN MIDDLE SCHOOL STUDENTS'
PREFERENCES ABOUT ANIMATED SERIES AND THE
DESIGN PROCESSES OF ANIMATION**

Aysel Yardımcı

İstanbul - 2024

YEDİTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES

THE RELATIONSHIP BETWEEN MIDDLE SCHOOL STUDENTS'
PREFERENCES ABOUT ANIMATED SERIES AND THE DESIGN PROCESSES
OF ANIMATION

A Thesis Submitted
by
Aysel Yardımcı

In Partial Fulfillment
of the Requirements for the Degree of
Master of Arts
in
Animation Design

Supervisor
Prof. Dr. Neda Üçer

İstanbul - 2024

DECLARATION OF ORIGINALITY

I hereby declare that this thesis is my own work and that all information in this thesis has been obtained and presented following academic rules and ethical conduct. I have fully cited and referenced all material and results as required by these rules and conduct, and this thesis study does not contain any plagiarism. The necessary permissions have been obtained if any material used in the thesis requires copyright. No material from this thesis has been used to award another degree.

To the best of my knowledge and belief, it contains no material previously published or written by another person nor material accepted for the award of any other degree except where due acknowledgment has been made in the text.

I accept all kinds of legal liability that may arise in cases contrary to these situations.

Aysel Yardımcı

ABSTRACT

THE RELATIONSHIP BETWEEN MIDDLE SCHOOL STUDENTS' PREFERENCES ABOUT ANIMATED SERIES AND THE DESIGN PROCESSES OF ANIMATION

Animated series are among the productions that children prefer to watch the most on television. Today, many children's channels broadcast uninterruptedly. Animated series, which have both entertaining and educational functions, can also be watched through devices such as tablets and televisions thanks to the developing technology. Children prefer different animation series in terms of quality, content and perception according to their age groups. It is important to determine the preferences of children, especially older children, about animated series. Within the scope of this research, 132 middle school students' living in İstanbul; practices of watching published animated series, preferences, likes and opinions about animated series and design elements were obtained through a quantitative survey method. The findings were analyzed and their relationship with the design processes of animations was examined. As a result of the research, differences were found between genders and classes in some statements. It was observed that middle school students had specific preferences and ideas about animations.

Keywords: Animation, Animated Series, Television, Animation Design, Child Development

ÖZET

ORTAOKUL ÖĞRENCİLERİNİN ÇİZGİ FİMLER HAKKINDA TERCİHLERİ İLE ÇİZGİ FİMLERİN TASARIMSAL SÜREÇLERİ ARASINDAKİ İLİŞKİ

Çizgi filmler, çocukların televizyonda en çok izlemeyi tercih ettiği yapımlar arasındadır. Günümüzde birçok çocuk kanalı kesintisiz olarak yayın yapmaktadır. Hem eğlendirme hem de eğitici işlevi olan çizgi filmler, gelişen teknoloji sayesinde tablet, televizyon gibi araçlar aracılığıyla da izlenebilmektedir. Çocuklar yaş gruplarına göre nitelik, içerik ve algılama açısından farklı çizgi filmler tercih etmektedir. Çocukların, özellikle büyük yaş grubundaki çocukların çizgi filmler hakkındaki tercihlerinin tespit edilmesi önemlidir. Bu araştırma kapsamında İstanbul’da yaşayan 132 ortaokul öğrencisinin; yayınlanan çizgi filmleri izleme pratikleri, çizgi filmler ve tasarım öğeleri hakkındaki tercihleri, beğenileri ve düşünceleri nicel bir yöntem olan anket metoduyla elde edilmiştir. Elde edilen bulgular analiz edilmiş ve bu bulguların çizgi filmin tasarımsal süreçleriyle ilişkileri incelenmiştir. Araştırma sonucunda bazı maddelerde cinsiyetler arası ve sınıflar arası farklılıklar bulunmuştur. Ortaokul öğrencilerinin çizgi filmlerle ilgili belirli tercih ve fikirleri olduğu görülmüştür.

Anahtar kelimeler: *Animasyon, Çizgi Film, Televizyon, Animasyon Tasarımı, Çocuk Gelişimi*

ACKNOWLEDGMENTS

I would like to thank my advisor Prof. Dr. Neda Üçer for her help and support from the beginning of my thesis process, making my research better and always spending time for me.

I would like to thank my dear friend Berna Şengüler who helped me a lot during my thesis process and my childhood friend Ayşe Serra Kapusızoğlu who was always with me.

I would like to thank my beloved family Naciye Yardımcı, Muhammed Yardımcı, Elif Yardımcı, Kevser Yardımcı, Gülsüm Yardımcı and my niece Öykü Yardımcı, who have always supported me and have always been with me and I would like to thank my late father Ömer Yardımcı, who always loved me.

TABLE OF CONTENTS

DECLARATION OF ORIGINALITY	i
ABSTRACT.....	ii
ÖZET	iii
ACKNOWLEDGMENTS	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES	vii
LIST OF TABLES	viii
1. INTRODUCTION	1
2. ANIMATION AND VIEWING PREFERENCES	5
2.1. Animation	5
2.1.1. Historical Development of Animation	5
2.1.2. Animation Techniques	9
2.1.2.1. Classical Animation (2D Animation- Cel Animation).....	10
2.1.2.3. Computer Animation.....	12
2.1.2.4. Other Animation Techniques	13
2.1.3. Animation Production	13
2.1.3.1. Pre-Production Stage:.....	13
2.1.3.2. Production Stage:	14
2.1.3.3. Post-Production Stage:	15
2.1.4. Design Elements in Animation	16
2.1.4.1. Scenario Design in Animation	16
2.1.4.2. Character Design	18
2.1.4.2.1. Character Design Elements	21
2.1.4.2.2. Character Typology in Character Design	26
2.1.4.3. Concept Design	26

2.1.4.4. Sound Design	27
2.2. Animated Series and Children	28
2.2.1. Television	28
2.2.2. Animated Series	30
2.2.3. Considerations When Designing Animation for Children	32
2.2.4. Child Development Stages	34
2.2.4.1. Late Childhood Development	34
2.2.4.2. Adolescence Stage (11-20 years for girls, 13-20 years for boys)	36
3.1. Research Aim	40
5.1. Results	61
5.2. Discussions	68
REFERENCES	78
APPENDIX A: ETHIC COMMITTEE REPORT	1
APPENDIX B: QUESTIONS OF THE SURVEY	2

LIST OF FIGURES

Figure 1 Participants' Places of Residence.....	46
Figure 2 The names of the animated series that participants like.....	58
Figure 3 The names of the animated series characters that participants like.....	59



LIST OF TABLES

Table 1 The distribution of participants' demographic characteristics.....	47
Table 2 The distribution of responses from participating middle school students to survey questions	49
Table 3 Survey questions with gender-based differences.....	55
Table 4 Survey questions with grade-based differences.....	57



1. INTRODUCTION

People have felt the need to exchange information with each other in every period of their existence. Depending on the level of development of the periods in which they lived, they used various communication tools such as television, radio or telephone to exchange information. One of the most popular communication tools used today is television. Thanks to its colorful images and sound, television provides viewers with various information and messages both visually and audibly (Cerrah Özsevgeç & Saka, 2018, p. 726).

Television, which converts electromagnetic waves from a source into sound or pictures, is a means of communication because it is suitable for broadcasting information, thought or behavior, and appeals to different segments of society such as different age, gender or occupational groups. Television is shown in sources as a tool that affects the socialization of people, holds an important place in children's lives, gives them information and expands their vocabulary (Güler, 1989, p. 166). Television creates a mental relationship with the viewer. The messages given to the viewer through television leave a positive or negative impact on the viewer. In addition to being a mass media tool that enables individuals in society to develop what they have learned in their own lives and brings the world closer, it is also thought to have a meaning for the child audience and the information the child learns causes changes or developments in the child (Yaşar Ekici, 2015, p. 72).

According to a study conducted by Yalçın et al. in 2002 on the factors affecting the television viewing time of preschool and primary school students, it was found that children attending primary education (7-11 ages) spend at least 2 hours a day in front of television (Yalçın et al., 2003, p. 626). The American Academy of Pediatrics stated that children spend an average of 16-17 hours a week watching television (Oral Paksoy & Arslan, 2021, p. 380). According to a study conducted by RTÜK in 2006 with children between the ages of 7 and 14, it was stated that they preferred animated series the most while watching television (RTÜK, 2006, p. 12). According to a study conducted by RTÜK in 2013 with students in the 6-18 age group, regarding the types of programs that students like to watch, the most watched program type in priority order is "animated series" with 28.7% (RTÜK, 2013, p. 29). In another RTÜK study

conducted in 2018 and covering 5th, 6th, 7th and 8th grade students, it was found that 11.2% of the students regularly watched animated series and 35.7% occasionally watched animated series (RTÜK, 2018, p. 112). As technology has developed and accessibility has increased, animated series have become easier to watch and can be watched with other media tools. In addition to the uninterrupted broadcasting and easy accessibility of television, there are also many children's channels on television (Yeten, 2022, p. 72). There are many domestic and foreign cartoon channels broadcasting uninterruptedly on television. Animated series can be accessed not only on television, but also on the internet through devices such as phones and tablets (Şen, 2020, pp. 45-46). It can be said that domestic thematic channels in Turkey cater to the 3-14 age group, and there is no free thematic channel for children aged 0-3 and over 14. Although children aged 0-14 form the basis of the audience of animated works, it has been observed that not only children but also adults have recently shown interest in animated films both in Turkey and around the world (BEBKA, 2018, pp. 22,23).

Children are affected by television, which is one of the most widespread and effective mass media today. Children's development, age, family and environmental factors and the content of the programs they watch determine the way children are affected by television. Television has both positive and negative effects on children. The important thing is to use television in the right way and consciously (Büyükbaykal, 2007, p. 32). The positive effects of television on children include learning social behaviors such as cooperation, sharing, tolerating mistakes, obeying rules, skills for solving problems, gaining some mental skills and concept learning, vocabulary learning, watching images related to nature and environment that they cannot encounter in real life and providing permanence in learning them. It has been observed that television has negative effects on children such as encouraging them to violence, increasing violence, making them think that this is a solution and making violence ordinary. It also has negative effects in different areas such as inability to concentrate attention, weakening of social relations, inability to express oneself, limitation of creativity, eye and sleep disorders, immobility, nervousness, fear, anxiety, school failure, consumption and brand passion (Üzer, 2019, pp. 45,46).

Although it is known as a result of observations that the qualities, content and perception of animated series watched by children vary according to their age groups, animated series can be watched by all age groups. Animated series can provide quick

and concise teaching by visualizing the abstract or invisible. Topics can be presented in a realistic or cartoonish and humorous way, which makes the teaching process more endearing and contributes to the desire to learn. The presence of factors such as color and sound can provide effective and more permanent learning for hearing and seeing. It can be said that animated series have the function of teaching and educating while entertaining. In animated series, another function of which is to inform, the concepts used in the presentation of the subject are both informative and the abstract concepts are given by concretizing them, enabling children to learn (Güler, 1989, pp. 168,169).

The definition of cartoon in the Turkish Language Association is: "A motion picture consisting of successively drawn pictures to indicate the movements of its characters in relation to a subject." (TDK, 2021). Animation is actually a general concept that collects all types of animation (Demir, 2019, p. 59). Animation is the arrangement of drawn pictures or static objects to reflect the feeling that they are moving (Tuğlacı, 1971, p. 390). Throughout history, efforts have been made to give the impression of movement, some drawings have been made and different tools have been developed. More than 35000 years ago, there are examples of animal paintings drawn on cave walls where the feet were drawn in pairs to create the perception of movement. In the columns of the temple built by the Egyptian pharaoh for the goddess in 1600 BC, the goddess was drawn in different poses and shown as if she was moving. In Ancient Greece, there are drawings of successive movements outside the vessels that create the perception of movement as they rotate (Sevindi, 2020, p. 13).

Animation production techniques can be listed as classical, stop-motion, computer and other animation techniques (Atabek Yılmaz, 2019, p. 20). The production process of animation films has three stages: pre-production, production and post-production. These stages have their own production and working methods. In the pre-production process; there are planning, preliminary preparation and design processes. There are script, scene, characters in the plans, background designs, storyboard and animatic stages. During the production phase, animation is produced. In the post-production stage, there are processes such as editing, sound, music, color, special effects (Özden & Ülgen, 2015, pp. 24,25). Performing these stages in accordance with the design processes will affect the quality of the animation produced.

This research aimed to investigate which animated series middle school aged children watch, which animated series characters they like, what they prefer while watching, their opinions and likes about the design processes in the production of animated series. The relationship between children's opinions, preferences, likes and the designs of animations was examined.



2. ANIMATION AND VIEWING PREFERENCES

2.1. Animation

In this section, the history of animation, techniques, animation production stages, animation design elements will be examined.

2.1.1. Historical Development of Animation

The Turkish Language Association defines animation as "The work of arranging and transferring individual pictures or still objects to film in a way that can give a sense of movement during the screening, animation." (TDK, 2022). Basically, animation involves still images creating the illusion of movement in the human mind (Pikkov, 2010, p. 14).

Artifacts from prehistoric times to the present day reflect people's desire to animate pictures or objects. Although there are different ideas about the history of animation, Egyptian cubes, Greek vases, animal depictions drawn and painted on caves in Northern Spain can be counted as the first examples. It can be said that the shadow plays that emerged in Asia and the Far East, which had an important role in the popularization of Turks with Karagöz and Hacivat characters, gave ideas to European inventors. In this context, "The Adventures of Prince Ahmed" is the most famous example of the harmony between shadow plays and modern animation films which are made in the 1920s by the German Lotte Reiniger with a technique adapted from Chinese shadow plays (Türker, 2011, pp. 227,228).

Developed in the 17th century by Kircher, the magic lantern can be considered the most fundamental step in the formation of the cartoon. The magic lantern was a projection device that used sunlight and candlelight in a box with a mirror and a lens (Güney, 2019, p. 11).

According to Peter Mark Roget, the eye, thanks to its structure, retains information about the visual stimulus for a short period of time. Thus, when it sees a fixed image or a frame of a picture, the retina retains the first image and makes a

connection with the second image. In this way, a sense of continuity is created. This situation constitutes the underlying reality of animation and is called "persistence of vision" (Ö. Demir, 2019, p. 1,2).

In the early 19th century, the "Thaumatrope", the earliest of the toys that can be considered as the first examples of animation, was a disk with a picture on both sides and tied to strings on the sides; when this disk was turned quickly, it gave the impression of a single moving picture. Another of these toys, the "Zoetrope", means "Wheel of Life" and was invented by Pierre Devignes. The viewer watched the tape inside this rotating cylindrical device by looking through equally spaced holes in the device. Emile Reynaud's "Praxinoscope" was a more advanced device, and instead of eye holes, a row of mirrors was placed in the center of the cylinder, and when the device rotated, the spectator looked into the mirrors and saw the pictures as if they were moving. Reynaud combined this invention with a projector and established the world's first movie theater (Şenler, 2005, pp. 100,101).

The flipbook, invented by John Barnes Linnett in 1868, is a small book that creates the impression of movement by turning the pages quickly. In 1872, Edward Muybride took detailed photographs and showed photographs of animal and human movements as if they were moving (Ürtekin, 2018, pp. 7,8). In 1888, cellulose reel films were started to be used by George Eastman. In 1895, the first moving pictures which is cinema, were presented by the Lumiere brothers (Türker, 2011, p. 230).

In 1906, J. Stuart Blackton made the animated film "Humorous Stages of Funny Faces" with the stop-motion technique (Ürtekin, 2018, p. 9). In 1907, Emile Cohl's "Fantasmagorie" consisting of white figures on a black background is known as the first cartoon series. While Mc Cay's most famous series was the animation "Little Nemo in Slumberland", his animation "Gertie The Dinosaur" was a great success. In 1915, Earl Hurd developed the transparent plate technique, which allowed animators to avoid the need to redraw the background for each drawing (İnce, 1991, p. 36). Earl Hurd's use of cell/cellulose animation is one of the important points in the development of animation (Şenler, 2005, p. 102).

Max Fleisher created the animation "Out of the ink Well" using the Rotoscope technique. In 1919, Otto Messmer created "Felix the Cat", the first cartoon character to gain personality (İnce, 1991, p. 36).

The cartoon industry, which developed between 1928 and 1938, started to become widespread in cinema. It is seen that Walt Disney-produced films stand out. "Mickey Mouse", "Donald Duck", "Silly Symphonies", the first sound cartoon "Steamboat Willie", the first color film "Flowers and Trees" and the first feature-length film "Snow White and the Seven Dwarfs" are important films (Şenler, 2005, pp. 103,105). Warner Bros. company created the characters of "Daffy Duck" and "Bugs Bunny" under the title of "Looney Tunes". During the World War II period, animated films with propaganda content were made in connection with the war conditions. William Hanna and Joseph Barbera produced the animated series "Tom and Jerry", "The Flintstones" and "The Jetsons". "The Simpsons", created by Matt Groening and aimed at adults, was broadcast in 1987. With the emergence of television, animated films began to be used in advertisements. The first animated movie broadcast on television was "The Bugs Bunny Show" (Ö. Demir, 2019, pp. 10,11,12).

The first example of today's animations is Ed Catmull's "Future World" work in 1976, in which he gave the drawings a three-dimensional appearance thanks to the software he made in the computer environment (Karaca, 2019, pp. 57,58).

Since the mid-1980s, Pixar, with support from Disney, has produced highly acclaimed digital animated films such as "Toy Story", "Monster Inc.", "Finding Nemo", "The Incredibles", which attracted a lot of attention. With the software they developed, they brought a different dimension to animation and made great progress in the field of animation (Şenler, 2005, p. 108).

In the 1930-1950 period, the animation cinema industry in the United States produced for entertainment purposes, while in Europe, works made with more modest technical facilities and in the experimental genre were predominant. In Russia, works were produced for ideological propaganda purposes, in Germany, while experimental films were produced until 1939, propaganda films emerged during World War II. The Czech artist Jiri Trnka has been called the Walt Disney of Eastern Europe and his works include adaptations of Czech and foreign literary artists. Canadian Norman McLaren brought a new perspective to the idea of animated films as moving drawings and emphasized the idea of "movement of drawings". According to this point of view, what happens between the frames is more important than what happens on the frames. The

Argentine film "El Apóstol" is one of the first feature-length animated films (Ö. Demir, 2019, pp. 29,30).

The manga style characters in Japanese animated movies, called anime, started in the 1970s and are still popular all over the world. They drew stories of Western and European culture such as Heidi and Candy Candy in manga style and sold them to the West. Thus, after the adoption of the manga style, in recent years they have been more successful in marketing traditional and mythological products of their own culture. Animated films are developing and becoming widespread in many countries today. America and Japan are the industrialized countries in this field. It can be said that countries such as France, Ireland, Russia, Poland and Slovakia have produced more original works in terms of both subject and technique (Türker, 2011, pp. 232, 233).

In Türkiye, Karagöz and Hacivat shadow plays can be considered as the origin of the art of animation. Released in 1932, "Skeleton Dance" was the first animated film shown in Turkey (Karaca, 2019, p. 59). "Dolmuş ve Şoförü" which is considered to be the oldest film strip of Turkish animation cinema, was produced by Eflatun Nuri Erkoç on film frames with tile ink and consists of 37 frames (Güney, 2019, p. 12).

In the 1930s, when the films of Disney and its contemporaries began to be shown in Turkish cinemas, cartoon artists became interested in this field and it can be said that they laid the foundations of the cartoon film in Türkiye with their works (Abalı, 2013a, p. 6). Although Cemal Nadir Güler, a cartoonist in the 1930s, made an effort to bring his cartoon work "Amcabey Plajda" into animation form, this work could not be finalized due to various impossibilities (Göktepe, 2015, p. 66). The first animated film in Türkiye was the three-minute "Zeybek Oyunu" made by Vedat Ar with his students in the course he taught at the State Academy of Fine Arts between 1947 and 1949 (Üzer, 2019, p. 47).

The animated movie "Evvel Zaman", which was made as a feature-length work between 1950-1951, was about Turkish fairy tale heroes such as Nasreddin Hoca and Keloğlan. However, the loss of the negatives of the film in the USA, where it was sent, caused an important loss for the history of Turkish animation (Ö. Demir, 2019, p. 14).

Animated films were mostly produced for the advertising sector between 1950 and 1970. In the 1970s and 1980s, Turkish animation artists won various awards

abroad. Tonguç Yaşar and Sezen Tansu co-produced the short-length cartoon "Amentü Gemisi Nasıl Yürüdü?", the first Turkish cartoon. The introduction of television led to an increased demand for animated series and Turkish-made animated series began to be broadcast on TRT. In the 1980s, many studios started to produce educational and instructive animated films for TRT and different state institutions. The 50-minute "Boğaç Han" made in 1988 was the first feature-length movie in Turkey (Abalı, 2013a, pp. 7,9).

The Cartoon (Animation) Department was first opened at Anadolu University Faculty of Fine Arts in 1990. In 2008, the first domestic children's channel TRT Çocuk was established. After 2007, the number of domestic and foreign children's channels increased (Üzer, 2019, pp. 47,48).

In 2009, the series "Keloğlan" was the first three-dimensional animation. In 2012, new animation studios were established with the government's support for domestic animation production. Some 3D films such as Kayıp Armağan, Kötü Kedi Şerafettin were released in theaters. With the increasing interest in animation, animation cinema continues to develop in Turkey (Ürtekin, 2018, p. 12).

There are many countries in the animation industry such as America, Japan, England, EU countries, China. Some countries are more developed in the field of education and some countries are more developed in terms of production. Animation is a sector that is on the rise and is an important source of economic income. It can be said that animation has become a sector in Türkiye, starting with the methods of western cinema, continuing with artistic discussions and with the establishment of TRT then the broadcasting of TRT Children's channel. In addition, it can be said that the studies that started on the examination of western products were enriched and originalized with local culture (Atabek Yılmaz, 2019, pp. 35,56).

2.1.2. Animation Techniques

Since feasibility is the most important point in the production of animation, it can be said that production techniques were emphasized more than artistic features in the initial period. The process of animation production techniques can be expressed as the development of existing techniques and the emergence of new ones with the

advancement of technology. Among the most commonly used techniques; Classical Animation (2D Animation-Cel Animation), Stop-Motion Animation, Computer Animation, Other Animation Techniques (Atabek Yılmaz, 2019, p. 20).

2.1.2.1. Classical Animation (2D Animation- Cel Animation)

An animation technique with width and height but no depth is called two-dimensional animation. By drawing by hand, 12 frames are drawn in 1 second and 12 frames of drawing are exposed in two frames (Kaplan, 2021, p. 57). Traditional animation is a technique that gives the impression that the pictures drawn on paper are moving by showing them one after the other at a certain speed of 24 frames per second (Cavalier, 2011, p. 396).

The animation technique of two-dimensional animation, which includes different types such as drawing on paper, watercolor, oil paint on glass, ink and celluloid, is called celluloid animation (Atabek Yılmaz, 2019, p. 20). Cel Animation emerged with the discovery of transparent celluloid sheets. Earl Hurd used the transparent film layer "celluloid acetate" in 1914 to make animated films. Thanks to this technique, which is the drawing of images on acetate film layers with paint or ink tools, the background image, which was drawn every time in the past, was drawn once, making it easier for animation artists in terms of material and time (Kaplan, 2021, pp. 57-58).

Classical animation is a technique in which 12 drawings are drawn for every second, edited with two-dimensional animation programs and effects programs are used for visual effects. The drawings are first drawn on lighted tables, on transparent papers fixed on the table. Glass of the same size as the papers is necessary for the superimposed drawings to be visible. The first and last drawings, which are the main movements, are drawn and intermediate movements are drawn between them. After the appropriate drawings for the background are made, they are drawn on acetate paper named "cell" and painted without overflowing the lines. Then, after the necessary camera settings and light settings are made, the shot is taken. In today's technology, animated series can be produced by drawing, painting and shooting without the need for a camera through computers (Mutlu, 2015, pp. 34,35).

The rotoscoping technique involves copying live footage frame by frame. In this technique, after the live shot is taken, it is brought to a program that the animator can copy over these natural images. In Disney's Snow White movie, this technique was used for Snow White and the Prince and as a result, it is seen that these two characters move more naturally like real people (Uçkan, 2004, p. 18).

The Live-Action animation technique is the use of animation images and live-action images together. Max Fleischer's Out of The Inkwell, The Three Caballeros, Mary Poppins, Anchors Aweigh are some examples of this technique (Kaplan, 2021, p. 62).

2.1.2.2. Stop Motion Animation

Stop motion animation has different types as a result of reasons such as artist choices, technological developments, shooting techniques, object choices or material use. One of these is object animation. It can be used in education, advertising or videos for different purposes. One of the biggest challenges is that objects are not designed for animation. As another type, models are created using clay in the clay animation technique. Different advanced materials are also used for reasons of color, stability, flexibility and non-drying. Another stop motion technique in which people are used instead of puppets is pixilation animation. It is a technique that has been used since the early days of cinema and is frequently used today. Cut-Out animation is the technique of cutting materials such as fabric, paper and photographs and animating them frame by frame. Puppet animation is a popular stop motion technique. Puppets made using ball or socket connections or armatures made of wire are dressed with various materials. Their faces are animated with three-dimensional prints to change facial expression and are changed frame by frame. Important films such as "Kubo and Two Strings", "Isle of Dogs", "Shaun The Sheep", "Coraline" were made with this technique. The stop motion method, in which the continuity of the movement is ensured by producing a new model for each frame, is known as animation by modification and is one of the frequently used techniques. Silhouette animation is a character-oriented technique in which dark silhouettes are used against a contrasting background (Başarır, 2022, pp. 12,13,14,15,16).

2.1.2.3. Computer Animation

Since the end of the 1970s, computers have continued to influence traditional animation techniques (Furniss, 2013, p. 286). The acceleration of the animation production process with the advancement of technology has led to a significant increase in the production of animated films and computers are instrumental in animation production (Kaba, 2020, pp. 14,15).

This technique is a continuation of the traditional animation technique and is a technique that enables animation with appropriate software on the computer (Çolak, 2019, p. 14,15). With the development of computer technology, animations are produced with different programs that include drawing and painting tools. Visuals have height and width, but not depth dimensions. The illusion of depth is created with camera movements. The programs can be vector or image-based (Atabek Yılmaz, 2019, pp. 26,27).

In three-dimensional (3D) computer animation technique; objects with height, width and depth are created and realistic lighting models are used (Çakın, 2012, p. 6). In other words, three-dimensional animation can also be explained as creating the illusion of depth by showing the two-dimensional image, which is created by plastering the animated models created in the spatial three-dimensional space of the computer, one after the other at a certain speed (Gürsaç, 1993, p. 18). In classical animation, each frame is drawn one by one and in stop motion animation, animators give motion to the objects. In three-dimensional animation, on the other hand, the objects are modeled on the computer and are given movement thanks to the skeleton. Animators create the keyframes, the computer calculates the intermediate frames and the computer processes the moving image. Therefore, it can be said that three-dimensional animation is a mixture of classical animation and stop motion techniques produced in a computer environment (Çakın, 2012, p. 6).

In the motion capture method, motion information is recorded and transferred to the three-dimensional model thanks to the points placed on the actors' skeletal system (Küçük, 2022, p. 36).

2.1.2.4. Other Animation Techniques

Apart from the techniques mentioned, different techniques are used to make the visual more effective or in experimental studies. Some of these techniques include the creation of visuals and sound through the technique of engraving on a film strip with different tools and time-lapse which is the accelerated display of photographs (Atabek Yılmaz, 2019, pp. 30,31).

2.1.3. Animation Production

There are different techniques and styles in animation production. The budget may vary depending on reasons such as the use of technology and the size of the team. In general, animation production can be analyzed in three stages. Pre-production stage; script, storyboard, animatic, design, modeling, rigging, texturing, production stage; layout, animation, lighting, rendering, post-production stage; effects, compositing, editing, audio (Gossman, 2012, p. 1).

2.1.3.1. Pre-Production Stage:

There are seven pre-production stages can be explained as follow:

Script: A script is, in general, the translation of an idea by the writer into a document format. The script includes the setting, character movements, dialogs and camera angles in detail (Gossman, 2012, p. 2). The animation production process, whether for television animated series or feature-length animated films, always begins with a script. After the script becomes the final draft, storyboard work begins (Scott, 2003, p. 21).

Storyboard: The storyboard shows all the scenes in the script with the necessary symbols to indicate gestures and camera movements, so that the storyboard artist, like an editor or director, shows the dramatic camera movements and transitions that will help tell the story. Another production stage step that can start during the storyboard process is the voiceover. Once the storyboard is completed and approved, the dialogue

are recorded. This is a step before the animation production process because the animation is drawn to match the dialogue track (Scott, 2003, p. 22).

Animatic: Once the storyboard is complete, the panels are combined with dialog, music and sound effects to see how it flows as a movie. This is called animatics. At this point, if there are problems, they are seen and solved before going to the final stage, and it also helps to determine how much animation is needed for each scene (Gossman, 2012, pp. 2,3).

Design: It is the part where characters, environment, vehicles, clothes, props are designed (Gossman, 2012, p. 3). When the storyboard reaches the production stage, the design process begins. This process includes background designs, character modeling, designing the necessary tools and equipment or anything else that will appear (Scott, 2003, p. 22).

Modelling: In 2D (limited) animation, the basic poses of the character are created and divided into several layered elements such as head, mouth, eyes, legs, arms. These divisions should be designed to be correct when they overlap. For 3D modeling, 3D software programs are used (Gossman, 2012, p. 3).

Rigleme: For 2D (limited) animation, the parts of the character should be set up like a puppet. For example, the foot should be connected to the lower leg, the lower leg to the upper leg and the upper leg to the pelvis. In 3D animation, character models need bones and other rigging systems to move after they are created. Other parts such as hair, muscles, clothes and eyes may also need rigging (Gossman, 2012, p. 4).

Texturing: For 2D animation it is usually a solid color, but in limited animation it can be a more complex texture that moves with the model. In 3D animation, digital models can have multiple textures. Sometimes they may even have textures that have a two-dimensional appearance (Gossman, 2012, p. 4).

2.1.3.2. Production Stage:

Production stages can be explained as follow:

Layout: Layout is the stage in which the lead animators organize how the scenes will move in the foreground and background, taking into account the characters' relationships with other characters (Scott, 2003, p. 22).

Animation: In 2D classical animation, when the character's position is sketched in the environment, the main poses are determined. These main poses determine the extreme points of the character's pose. The movement is then smoothed by drawing in-betweens. This sketchy animation is known as "pencil test". The rough animation lines are then inked, painted and matched to the background. Effects such as shadows and highlights can be added. In 2D limited animation, digitally manipulable drawings are made to mimic classic animation. Different mouth positions are pasted onto the character's face to create lip synch. Parts of the character are animated on the computer like a puppet. Inbetweens are automatically filled in by the software. In 3D animation, the rendered character can be moved by the animator like a virtual puppet. Motion is given with systems such as xyz coordinates. The software automatically fills in between the main poses (Gossman, 2012, pp. 5,6).

Lighting and Rendering: Lighting is not only placing the lights to be used but also controlling the direction of these lights in the resulting image. Rendering is the painting and display of the scene created in three dimensions and the objects in it, calculated by the computer from a certain angle with the effect of surface features and lights (Gürsaç, 1999, p. 37).

2.1.3.3. Post-Production Stage:

Post-production stages can be explained as follow:

Effects: Effects can be used for a wide variety of things. Making the environment look crowded, some kind of magic, fire, etc. can be done through effects. Through the computer, the angle of the camera can be changed, mistakes can be edited, light can be corrected, the speed of movement, the atmosphere of the scene can be changed (Moreno, 2014, p. 36).

Compositing: Compositing takes all visual materials such as characters, props and sets and combines them with auditory materials such as dialogue, soundtrack and sound effects in the order of viewing (Selby, 2013, p. 151).

Editing: Editing is a phase that starts during the animatic process to make sure that the shots flow at a certain pace. As the production progresses, the editing is updated and finalized. In this phase, sound effects and music are also edited with the image (Gossman, 2012, p. 7).

Audio: Although the final version of the music is not added until the end, the temporary sound and music are included in the animatic phase to capture the mood and set the pace (Gossman, 2012, p. 8).

2.1.4. Design Elements in Animation

Within the scope of this thesis, the elements of animation design; scenario, character design, concept design, sound design will be emphasized.

2.1.4.1. Scenario Design in Animation

The idea development phase is a long process that can change. At this stage, different ways are discussed to add depth and make the message effective. Efforts are made to appeal to the audience (Moreno, 2014, p. 22). Idea development is the most important stage in an animated film. The artist conducts research to develop the idea for reasons such as increasing the variety of expression, developing an understanding of the world, and providing inspiration. For animation to be effective, it must have a good subject. Animation without a good subject can fail to convey the message even if the drawing is good, so the subject is very important in animation. The attractiveness of the subject affects the viewing and purchase of the animation. For this reason, it is necessary to tell a good story in animation (Kaplan, 2021, pp. 53,54).

Definition of subject is: "The thought, event or situation dealt with in speech, writing, work, subject, subject matter." (TDK, 2022). In animated series, it is important that the subject matter is suitable for the child's psychological characteristics,

entertaining and educational. The subject can be handled realistically or humorously in a cartoonish style where the heroes are made more endearing. The subjects covered in animated series are generally entertaining and relaxing. While it may include themes such as struggle, success, cooperation, friendship, family, it is also possible to see negative behaviors such as violence, cheating, assault, lying (R. Demir, 2019, p. 56).

According to Pixar's storytelling style, the creative storytelling process is initiated by starting with the sentence "let's assume". The theme of the story, that is the lesson the character will take at the end of the movie, is decided and then story is constructed. Pixar aims to ensure memorability with the theme. In general, characters work for their goals, but on the way they realize that their real wants or needs are actually something else more important. Usually these discoveries form the theme. After the theme is clear, a dramatic change section is written that includes the character's development (Zengin, 2020, p. 15).

The story structure usually used in screenwriting for animation, film and television is called "three-act structure". Act 1 (set up), the first stage, is where the story begins and in this exposition stage, the storyteller establishes characters, locations and conflict. The second act (act 2, confrontation) is the middle of the story; there are twists and turns and events that increase the excitement and tension of the story. Act 3 is the end of the story and in the resolution stage the climax is reached and the problem is solved. The main characters achieve their goals (Mou, 2015, pp. 125,126).

The first act shows who the character is, what he/she wants and the problems on the way to achieve what he/she wants. The routine of the character or the situation described is shown to introduce the audience. While creating the character, the physiological, psychological and sociological characteristics of the character are designed. The protagonist is the character who has the energy, motivation or charisma to fight the situations that will happen to him/her. The antagonist, on the other hand, is the character who has the opposite goal and attitude to the protagonist and is the biggest obstacle for the protagonist. The transition to the second stage, the exposition, is made at the point of no return "plot point". In the second act, different problems will come to the character and the character will try to overcome these problems. While the obstacles become more difficult, the character develops. If the audience identifies with the character, they adopt the character. Two kinds of identification can be established; the

character who is admired and the character who is victimized. In the third act, although the character tries to solve the problem with all his efforts, the solution seems very difficult and an unexpected resolution occurs. They have learned from their previous experiences and realized their mistakes, they are ready for change. At this stage the character realizes what is really important and fights for it. The dissolution should be emotional (Zengineken, 2020, pp. 28,29,30,31,32).

Turning an idea into a script consists of three stages. The first one is the premise, which is the synopsis of the script; it can be called the story of the movie. It is a short summary of the script. The story of the film, brief information about the characters and events are summarized. Dialogues are not included (Ayvaz, 2004, p. 29). It is simply telling the story, usually between 1.5 pages and 3 pages long. It should be as short as possible to tell the story. One of the important conditions for it to be accepted is that it is original. It is important to keep this stage simple and not overcomplicate it (Scott, 2003, pp. 36,37).

Outline is the second stage; characters are elaborated, important events can be mentioned in more depth and important dialogues can be included (Ayvaz, 2004, pp. 29,30). It is the drafting of the story. It is a form of prose that lays out every scene that will be in the final script (Scott, 2003, p. 37).

The script is the form in which all the scenes of the story are written in a special form. It is the part where any environmental features or movements, dialogues, transitions, camera angles and camera movements are defined if necessary. It can be of different lengths (Scott, 2003, pp. 37,38).

In animations, unlike normal films, visualization of the plot is more valuable than dialogues (Uçkan, 2004, p. 20).

2.1.4.2. Character Design

A definition of character in TDK is as follows: "A person who is dealt with in a work in terms of emotion, passion and thought." (TDK, 2022). Imaginary heroes created by different methods can be called characters. Characters, which can be created

for different fields such as books, animations, toys, and festivals, contain features that include the subject (Arslan, 2013, p. 26).

Character design can be defined as the art of visualizing the characters, heroes and environments in a script without the need for words. Characters are usually the carrier of the story. Characters are expected to act in harmony with the existing story. Otherwise, the audience feels disharmony (Süalp, 2019, pp. 53,54).

The process of designing a character is the impression that a living or nonliving being to be animated leaves on the audience by designing its structure, personality, costume together with its environmental conditions. Character design is made according to the animation technique and type (Çakmak & Karoğlu, 2020, p. 520). In character design, which is the visualization process of the characters existing in the script, the artist creates characters in a unique way according to his own aesthetic knowledge and life experience in accordance with the elements such as the purpose, lifestyle, relationship with others, psychological characteristics of the character in the text written by the screenwriter (Gökçe Arslan, 2010, p. 350).

Character design, which is an important part of the pre-production phase, also affects later stages such as modeling, rigging and animation of the character, and can make the project easier or more difficult. Therefore, character design in accordance with the project design and scenario is an important stage for the other steps and costs of the project (Özden & Ülgen, 2015, pp. 24,25). Before starting the character design process, the type and technique of how the animation film will be made should be determined because both animation applications and design preferences will be shaped according to the determined technique; the character modeled in three dimensions, the character to be drawn by hand or the puppet character will have different characteristics (Çakmak & Karoğlu, 2020, p. 520). The movements, gestures and mimics that the character will make in the script should also emerge during the character design phase. The character designer determines some points not only for the character physically but also for the animation stage in the production process. A well-designed character will be easier to animate (Özden & Ülgen, 2015, p. 26).

In the character design process; the area where the character will be used, the audience, the originality of the character, the aspects that are different from other existing characters are the parts that should be considered. The character's age,

appearance, hair and skin color, attitude and complementary clothing and accessories are among the factors that can provide originality (Siyamoğlu, 2013, p. 43).

In general, characters in animations can be listed as human characters, unreal characters, animals and non-living objects (Malatyaloğlu, 2014, p. 29).

Human characters: Human characters behave psychologically, physiologically and sociologically like normal human beings. Their reactions to the situations that happen to them and the way they feel as if they are real will enable the audience to empathize with them. On the other hand, in educational animated series real characters can serve as role models for children such as mothers, fathers, and teachers. In this way, it is ensured that the message given in the animated series is received, such as the child learning how to solve a problem they face (Malatyaloğlu, 2014, p. 29).

Animal Characters: Since the past, animals have appeared in paintings, stories and plays through symbolic expression, and they are often seen as animal characters in animated series because they are close to people and are loved. They represent certain characteristics such as the bravery of a lion, the loyalty or courage of a dog. While children's love and imitation of animals enables them to move physically, through their communication with animals, they can learn to communicate, solve problems, take responsibility, and at the same time develop their ability to love and empathize. As a result of the relationship between children and animals, children are positively affected psychologically, physically and cognitively, and become individuals who can communicate better when they grow up. Therefore, animal characters, which are frequently present in animated series watched by children, are important in terms of being both cute and interesting and educational (Malatyaloğlu, 2014, p. 31,32).

Surreal Characters: Surreal characters, which are remarkable in legends and movies, also have an important place in animated series. Although surreal characters in animated series offer a wide range of imagination, care should be taken in the design stages of such characters because the audience may find them illogical and may not show interest. In animated series, such characters can also be given human characteristics. By symbolizing the lives of monsters or creatures, messages such as communication, that differences are not important, and love can be given (Malatyaloğlu, 2014, pp. 33,34).

Object Characters: Non-living beings can also be used in animated series and animated by giving them human characteristics. These human characteristics should be given by taking into account their functions in reality (Malatyahoğlu, 2014, p. 35).

2.1.4.2.1. Character Design Elements

As in other branches of art, there are design elements in character design, and if these elements are used correctly, original and high quality characters can be obtained. These design elements can be listed as form and silhouette, anatomical proportion, costume and accessories, color and style (Erdoğan, 2020, p. 62).

Form and Silhouette: The form, which is the design step where the character is given clarity and basic features, can be defined as the final form of the artwork in which line, form, color, stain, texture and other features are arranged (Ulutaş, 2021, p. 34).

Form, enables the character to be formed, to be recognizable among other characters, and to determine its physical and psychological characteristics. The person who designs the character tries to determine the form with different methods by thinking about what kind of form the character should have. This is the important stage where the character is first given its characteristic features. The extensions added to the character can direct the character's movements and affect his/her psychological behavior. Taking the animal form as a reference, if it is desired to impose humanoid features and behavior on the character, this can be achieved by designing the character in a structure standing on two legs (Erdoğan, 2020, pp. 62,63).

In character design, first of all, lines are used to reveal the character through forms. Geometric forms create certain associations in the subconscious mind and accordingly some feelings and thoughts about the characters emerge. In the human mind, square forms create associations such as endurance, honesty, reliability, regularity and masculinity; round forms create associations such as delicacy, joy, integrity, comfort, protectiveness, childishness; triangular forms create associations such as mobility, slowness, conflict, tension, aggression. In character design, drawings created using such forms create stereotyped designs (Özden & Ülgen, 2015, p. 27).

In character design, the square, circle, triangle and oval form are the foundations for shaping the character's personality and general appearance. Circle and pear shapes, which are more pleasing to the eye and easier to move, are often used in most traditional animated series. In the 1930s, cute characters generally had larger heads than their bodies. The circle shape is often used for cute, friendly characters and baby characters. The square form is usually used for characters with a strong, solid and tough appearance or character, while obsessive, evil characters are expressed in the triangle form. By adding these forms and other forms to each other, more complex or different characters are created (Malatyaloğlu, 2014, pp. 39,40).

A good character design should have a readable and understandable silhouette. Silhouette helps the character to be remembered and convincing designs (Malatyaloğlu, 2014, p. 45). The silhouette is simple, intonation-free and provides the viewer with visually recognizable images and allows us to recognize the character by conveying the character's unique characteristics (Özden & Ülgen, 2015, p. 28). When designing the character, straight and symmetrical poses should be avoided and more remarkable poses should be created. Thus, a lifeless mannequin pose will be avoided or a doll style with a harsh appearance will be avoided (Karaşahinoğlu, 2021, p. 31).

Anatomic Proportion: After clarifying the psychological, physical characteristics, and stylistic expressions that can be represented with forms, the sketches of the character are started based on external features. During this phase, the anatomy of the character becomes the most crucial criterion influencing the design. The character designer engages in drawing studies to reach the overall goal, taking into consideration the character's age, size, and physical abilities or limitations. At this point, efforts are made to determine the proportions of the body parts of the character. While creating the body proportion, the head is used as a fundamental measure and varies according to the character, ranging between two to nine heads (Özden and Ülgen, 2015, p. 29).

Understanding the structure of the human and animal body and possessing anatomical knowledge is essential for creating more realistic characters. When the structures of living and nonliving beings are considered, it is evident that there are different body structures, and characters can have varying body proportions. For example, the heads of babies are proportionally larger than their bodies, and their hands

and feet are drawn smaller in proportion to the entire body. Similarly, the hands and feet of the elderly are proportionally smaller when compared to those of younger individuals. In the case of children, the head is typically drawn shorter in proportion to the body, with the torso being shorter than the legs on average. Incorporating such contrasts visually allows for the emergence of distinct characters (Malatyaloğlu, 2014, pp. 42,43).

The ratio between the body and the head is designed in various proportions to describe the character's structure and ensure visual appeal (Özden and Ülgen, 2015, p. 30). Deformations, such as drawing the heads of cute characters larger or conversely, giving powerful characters a smaller head but a more massive body, can be employed to design characters in a balanced manner. Characters should also have a balanced anatomical ratio and harmony with the characters in their environment (Erdoğan, 2020, pp. 64,65). Character scale is one of the crucial aspects in character design. Characters interact with each other and can vary in size. The existence of characters in various sizes contributes to both visual aesthetics and the humor of animation. Proper scaling ensures that the character is easily noticeable within the spaces they inhabit (Malatyaloğlu, 2014, pp. 43,44).

Costumes and Accessories: Costumes and accessories play a crucial role in capturing the viewer's attention and providing clues about the character. They convey information about the character's interests, personality and the time and place they live in. Sometimes, information about characters can be gleaned through their costumes and accessories (Ulutaş, 2021, p. 40). For instance, the Teenage Mutant Ninja Turtles can be differentiated solely by their weapons and the colors of the fabric on their heads, while the Smurfs, who are anatomically the same, are distinguishable through their accessories and behavior. This highlights the significance of costumes and accessories in character design (Ülgen, 2019, pp. 76,77).

Costumes and accessories are also important during the animation stage because they influence the character's form and silhouette. These accessories move with the character, enhancing the character's expression and visual impact through elements such as the posture of the character's cloak, the weapon directed by the character's arm and the wrinkles in the clothing that emphasize the character's pose. Therefore, costume designs should align with the message the character wants to convey and the character's

physical, psychological, or sociological situation. In dynamic characters, design lines that evoke this are used, while in static characters, simple, straight lines are employed. In animation, characters are designed with compatibility and consistency in mind, considering their harmony with each other. Accordingly, colors, textures, and styles are created. Additionally, unnecessary lines that may complicate perception are avoided in the costumes of characters (Özden and Ülgen, 2015, pp. 30,31). In films, developments in the script can be conveyed through changes in characters' costumes and accessories. Altered clothing style, colors, new accessories, or changes in hair can be hints to the audience that the character is evolving or undergoing a transformation. Characterized animals (such as Tweety) or object characters (as seen in a film about cars) sometimes use very few or no costumes or accessories, yet they are still designed with colors and shapes that provide information about their characters, such as the fur of animal characters (Ülgen, 2019, pp. 79,80). The costumes and accessories of the main characters, who are most frequently seen by the audience, typically contain more details compared to other characters. Since costumes and accessories reflect certain characteristics of the character, providing more information about the main character, the audience is more likely to find the character more believable (Malatyalıoğlu, 2014, p. 49).

Color: The use of color can evoke psychological and emotional responses in individuals, establish cultural and symbolic meanings, convey messages, and guide behavior. In animated series, colors are carefully and creatively used for emotional expression based on the subject and concept. In character design, after the final form of the character is established, color models are created to decide on the character's color, texture, or pattern. Through these created color palettes, the harmony of character coloring is ensured for consistency. When selecting colors, considerations include psychological, cultural, or historical reasons, as well as factors such as the age of the target audience, the character's personality, the time and location of the animation, and the desired emotional impact. For example, brighter primary colors might be used for children under 4 years old, while as the age group increases, more realistic colors can be employed. For audiences aged 14 and above, a complex and detailed color palette may be suitable. As the audience's age range increases, coloring and texture become more sophisticated. Another crucial aspect to consider is the images created by colors, as they can evoke different emotions in the mind, known as the psychological effect of

colors. Therefore, through colors, hints about the character's personality can be provided to the audience (Ülgen, 2019, p. 86).

The color red evokes feelings of heroism, quality, warmth, provocation, energy, challenge, hostility and tension. Blue represents intelligence, trust, effectiveness, silence, necessity, calmness, smoothness, coolness, distancing or loneliness and unpleasantness. Yellow signifies optimism, certainty, self-respect, extroversion, creativity, and friendship as well as irrationality, cowardice, restlessness, and fear/anxiety. Green is associated with feelings of harmony, balance, freshness, admiration, natural awareness, peace, dullness, stagnation and weakness. Purple conveys spiritual awareness, vision, order, reliability, truth and quality, along with introversion, inadequacy and concealment. Orange suggests feelings related to nutrition, warmth, security, energy, entertainment, wealth, disappointment, meaninglessness and youth. Pink is associated with support, warmth, love and restriction. Gray, on the other hand, implies psychological neutrality, pessimism or melancholy and a lack of vitality. Black is linked to sophistication, attractiveness, productivity, pressure, coldness, danger. White is connected to hygiene, openness, virtue, modernity, efficiency, coldness, elitism and unpleasantness. Brown may evoke feelings of seriousness, warmth, nature, sincerity, support, expansiveness and a lack of direction (Bopche, 2015, pp. 26,27,28,29,30).

Character color creation should pay attention to its harmony with the background and it is essential to ensure that contrasting colors are used to prevent the character from getting lost (Ulutaş, 2021, p. 44). Examples like the Pink Panther, remembered for its color and anthropomorphic form or characters like those in The Simpsons, showcase how the colors of characters contribute to distinctiveness and memorability in their appearance (Ulutaş, 2021, p. 105). When creating a color palette, simple and memorable color schemes are achieved by selecting a dominant color within a color hierarchy and determining other colors to complement it. This approach helps in obtaining successful character designs (Karaşahinoğlu, 2021, p. 31).

Style: Characters can be grouped according to their structures as female, male, cute, supporting roles, inanimate, mechanical characters, animals, and monsters. Styles in drawing, on the other hand, are grouped as logo style, simple style, ordinary style, complicated style, and realistic style. Styles are chosen based on factors such as the

needs of the script, character designer, production concept. Logo style involves characters that are quite simple and are generally designed in a cute manner. They have small noses, wide foreheads, large eyes and oversized heads. It can be said that they are used in animations targeting children (Özden and Ülgen, 2015, p. 33). Simple style, compared to the logo style, is more detailed yet still simple and is generally used for children in primary school. Complicated style is more realistic, containing detail and texture and is preferred by companies like Pixar and Dreamworks. Ordinary style, also known as cartoon style is the most commonly used style. It allows for designing more facial expressions, emotions and body poses. Realistic style is used in digital animation films with highly realistic character designs and in computer games close to reality (Özden and Ülgen, 2015, p. 33,34).

2.1.4.2.2. Character Typology in Character Design

The evaluation of a living being in terms of its physical, psychological, and sociological aspects is referred to as character typology. This process imparts personality traits to the character, forming the basis for the design of the character. Initially, the physical features of the character stand out, encompassing the external appearance and physical structure. Following the examination of physiological features, a more detailed observation occurs, and when analyzing the character, sociological characteristics come into play. Sociological features involve the character's communication, connections with the outside world and lifestyle. Preferences, behaviors, and social experiences are among these attributes. The analysis of the character continues in the psychological dimension. Psychological features are the fundamental qualities that make up the character and constitute its inner world. Characteristics affecting sensory organs, such as anger, happiness, and sleeplessness, fall into this category (Erdoğan, 2020, pp. 68, 69).

2.1.4.3. Concept Design

The part where the style of animation is created and determined is called concept design. It involves thinking about all the visuals that exist in animation (Erkan, 2021, p. 38). Concepts are the concretization of abstract ideas that have a form and basis with

research and structural development over time (Selby, 2013, p. 48). In the process of character and concept design, characters, environments and objects are designed; in short, it can be called the pre-visualization of images. At this stage, which is an important stage in the appreciation of the cartoon, it is important to ensure that the characters and the environments are unique and appeal to the target audience. A style suitable for the story should be created (Erdoğan et al., 2012, p. 116).

Image design is not only moving the figures and props, but also designing the background that creates an emotional content about the place where the event takes place (Furniss, 2013, p. 26). In animation, the figures should be in harmony with the background and the background should not be in the foreground of the figure (Kaplan, 2021, pp. 55,56). The environment should be compatible with the objects in terms of size, color and texture. It should be able to create a prejudice about the details or objects on the backgrounds and time (Ürtekin, 2018, p. 20).

2.1.4.4. Sound Design

One of the most important elements in animation cinema is sound. Music, effects and dialogues, which are at least as effective as the image in conveying the story, are complementary. Music also plays an important role in object design. Objects are made to move according to the rhythm of the music (Ö. Demir, 2013, pp. 62). Before creating the music of the movie, features such as the content, duration and atmosphere of the scenes are taken into consideration. In the vocalization stage, sounds are produced with various tools to make the non-existent events in the animation believable and to make the animation appeal to the ear (Aksoy, 2002, p. 13). Dialogue sounds must be compatible with the character's lip movements (Kaplan, 2021, p. 57).

For animation to be effective, sound needs to be designed to integrate with the script and visual elements. Sound accompanies the narrative and helps shape the production of the animation, including dialog, special effects and music (Selby, 2019, p. 106).

Music accompanies the sense of sight by appealing to the sense of hearing and can be said to increase comprehension and permanence thanks to the aesthetic

perception it provides. It is important to design main theme melodies according to the age and gender of the target audience of the animation (İmik, 2011, pp. 19,20).

2.2. Animated Series and Children

In this section, animated series, television as one of the most popular media in which these series take place, the effects of animated series on children and child development stages will be examined.

2.2.1. Television

Since human beings are social beings, they have been in constant communication from the time they existed until today, and they have used different communication purposes to develop ways of communication. These tools are called "mass media". Today, it is also referred to as "media" (Koç, 2019, p. 44). Tools such as television, radio, books, magazines, newspapers, internet are some mass media (Üzer, 2019, p. 40). Among various mass media, television is a tool that is easy to perceive and consume due to its visual and auditory techniques while feeding on art branches such as cinema, music and theater. At the same time, it has a dominant media position with the effect of being a tool that can be easily accessed by all segments of society (Şahin, 2017, p. 35).

Television is a tool that can transmit messages to many people at the same time and offers audio, color and multi-dimensional viewing as a result of transmitting images and sound about an event or situation through electromagnetic waves (Temizyürek & Acar, 2014, p. 27). Television has important effects on the formation of emotions, thoughts and values in human life, making sense of the world, directing perceptions and attitudes, behaviors and lifestyle (Üzer, 2019, p. 41).

In 2018, RTÜK conducted a survey on television viewing trends and found that 86.7% of the participants watched television and the average daily television viewing time was 3 hours 34 minutes (RTÜK, 2018, pp. 14,15). According to the Television Audience Research Company (TİAK) Television Audience Report, the average time spent watching television in 2020 was 2 hours 54 minutes in the world and 4 hours 33

minutes in Turkey (TİAK, 2021, p. 61). According to data from the Turkish Statistical Institute (2018), 92.5% of children between the ages of 6-15 watch television almost every day, and the most watched type of broadcast is animated series followed by movies and series (Kaymak, 2020, p. 31).

Television is also an important part of children's world. Unlike most adults who watch television for entertainment, children watch television for the purpose of knowing and understanding the world, which they find entertaining (Öztürk & Karayağız, 2007, p. 81). Some of the reasons why children watch television include the opportunity to learn about the world and to identify with exciting and interesting characters. It is seen that children see television as a playmate and are selective about the content. Unlike adults, children are more influenced by broadcasts. For example, children may have doubts about the reality of the characters. It is seen that children take the characters they see on television as role models and imitate their positive or negative characteristics. In Huang and Lee's 2009 study on the impact of television on children's behavior, it is seen that children aged 6-7 are more influenced by television than older age groups (Huang & Lee, 2009, p. 498). In order to protect children from negative effects, parents should be made aware and children should be given the habit of being conscious viewers (Kaymak, 2020, pp. 32, 33).

Among the biological and environmental factors affecting development, television and animated series can be counted among the environmental factors. At the same time, the fact that television is a tool with a dramatic structure causes children to see television as a visual toy (Ö. Demir, 2013, p. 144). Children's interaction with television starts at an early age because of its easy access at home. From the age of two, children begin to show interest and react to moving images on television. Television appeals to children's discovery and learning abilities through audio and visual stimuli. In addition, television affects children in childhood when learning by imitation is most effective (Üzer, 2019, pp. 41,42).

Television is one of the objects with which children communicate at an early age. This communication is one-way, that is, only from the television to the child. For this reason, the media can be like a teacher for children who learn by imitating what they see. The characters they see on television become an important identification model after their parents for children in the process of personality development.

Television, which is visual and auditory, can provide effective learning by appealing to multiple senses. As a tool that can teach while entertaining, television can have a positive impact on child development if it is watched at the right time, with appropriate program content and controlled viewing time. It can contribute to mental and language development. Violent content and negative role models are among the issues that need attention (Yavuzer, 1990, pp. 222,225).

Television has both positive and negative effects on children. When the content of the programs is prepared in an educational, controlled and correct way; it can have a positive effect on issues such as teaching concepts and values, school adaptation, language development and learning new vocabulary. As a negative effect, in terms of social and emotional development, it may hinder communication because children cannot give feedback to television. In terms of cognitive development, it can limit skills such as thinking, analyzing and evaluating. Fast-flowing images can cause distraction and negatively affect language development and sitting in front of the television for too long and staying still for a long time can negatively affect physical development (Cengiz et al., 2020, p. 272). The American Academy of Pediatrics recommends that children under the age of 2 should not watch television and older children should not watch more than 1-2 hours of television per day (Öztürk & Karayağız, 2007, p. 84).

2.2.2. Animated Series

It has been revealed in many studies that children's most preferred productions on television are animated series. For this reason, children's being affected by the animated series they watch produces similar results to their being affected by television (Kaymak, 2020, p. 34). The fact that there are channels broadcasting animated series on television 24 hours a day, channel diversity has increased, and program content has become attractive further increases the interaction between children and animated series (Üzer, 2019, p. 48).

Animated series with a message is also a means of communication and has a social function. It has the opportunity to reach large masses because it is easily reproduced (Yaşar Ekici, 2015, p. 71). Animated series should be appropriate for

children's ages and developmental stages, and the content and viewing times of animated series should be controlled by parents (Yaşar Ekici, 2015, p. 81).

According to Habib and Soliman's 2015 study, "Cartoons' Effect in Changing Children Mental Response and Behavior", animated series are a powerful influence on childhood. This influence can be both positive and negative. On the one hand, it can affect children negatively due to negative factors such as intense exposure to harmful content, but on the other hand, television can help raise a balanced child with a normal mental structure. At the same time, it can teach children experiences that they cannot learn from school or their parents or that they will not experience in their lives (Habib & Soliman, 2015, p. 263). The positive effects of animated series can be listed as helping children start learning at an early age, helping their cognitive development, language development, increasing creativity, reducing stress and making them laugh, helping them learn different things. Negative effects include violence, unruly behavior and lack of empathy, poor language use, asocial behavior and children seeing bad role models. It can cause health problems due to sedentary lifestyle (Bedekar & Joshi, 2020, p. 16).

The qualities, content and perception of animated series vary according to age groups. While preschool children show interest in shorter and simpler narrative animated series, primary school children show interest in series, themed and longer animated series. As a visual communication tool, animated series have some functions such as instructing, educating while entertaining, informing, and teaching concepts (Güler, 1989, pp. 168,169). According to another perspective, animated series can be classified as emotionally charged, preparatory for life, directly educational, and science fiction animated series that reinforce the impact of technology on children (Muslu, 2015, p. 46).

Animated series affect people in two ways: the content of the subjects, the speech and behavior, the subject matter conveyed and the way they are presented. The structure of the cartoon can be classified into two categories: one is usually short and entertaining animated series that are about repairing something that is broken or about traveling, and the other is usually longer and educational animated series that are about abstract or socially relevant purposes. According to one view, the story is one of the reasons why animated series are watched. At the same time, the fact that the animated

series is emotionally, cognitively and behaviorally close to children and that they identify with the heroes in the animated series are other reasons for watching (Güler, 1989, pp. 172,173,175). Well-written script, correct use of sound and visual effects, colors, good-looking characters are some of the reasons why children like and watch animated series (Habib & Soliman, 2015, p. 250). One of the reasons why children watch animated series is spiritual satisfaction. It can be an area where some children satisfy their egos and some children escape from responsibility. Children can experience things that they cannot do in real life or take an idea of how to deal with the problems encountered (R. Demir, 2019, p. 37).

2.2.3. Considerations When Designing Animation for Children

The target audience should be taken into account when creating an animated series. The target audience can be classified as toddlers (0-3), preschoolers (2-5), kids (6-8), tweens (9-12), teens (13-15) (Scott, 2013, p. 144). In an animation scenario for children, everything should be described visually. Emotions should be expressed clearly, not abstractly. When writing for children, the message is better understood and retention increases when the narrative is told by combining visuals and dialog. Dialogs should be short and fluent. For example, in a script written for the 3-6 age group, the dialogs should be short and sentences with a maximum of 5 words should be used. As the age level increases, the number of words used can also increase. Messages should be given in such a way that they can be seen and felt throughout the movie instead of didactically or having the characters say them. Curiosity, excitement, emotion and entertainment are among the elements that should be in the movie (Abalı, 2013b).

The script should be created according to the target audience and the subject, character, environment and narration method should be determined. A scenario written for 9 year olds will be complex for 3 year olds, while a scenario written for 3 year olds will be simple for 9 year olds. For example, introducing the concepts and objects in the Pocoyo animated series, which appeals to 3-5 year olds, would be boring for a child who knows them. Another issue is to pay attention to child development stages. For example, since the 3-6 age group cannot understand abstract subjects, events should be made concrete and explained. Age and culture are also issues to be considered when creating characters. Choosing characters that the child can see around him/her and feel close to

is important in terms of the emotions the child will feel. Including characters of the same age for the target age group also helps the child to identify with them and take them as a role model. It is also important that the characters have a weakness for the child to find them close to themselves. It is essential to keep the narrative simple in animations for children. With creative ideas and a simple narrative, scenarios that are both original and remarkable for children should be created. It is also important that the theme is present throughout the movie (Abalı, 2013c.). As a general rule, the younger the audience, the shallower the character should be, so that the character's wants and needs are close to each other. Because children are too busy exploring life to be interested in or understand the deeper problems of the characters (Scott, 2013, p. 146). As a simple rule of thumb, adults are more interested in movies where people are at the forefront because they have seen enough action in their lives, while children are more interested in action because they already see how life works and see different characters at school. Of course, this rule is a generalization and rules can be broken. As a matter of fact, it has been observed that action movies are watched a lot and character movies are not (Scott, 2013, p. 36). Animations for children should not contain scenes such as swearing or violence (Moreno, 2014, p. 22).

Characters can be called the heart and soul of an animation. It is the character that the audience is interested in, that makes the audience laugh or cry. Characters are divided into real ones and cartoony ones (Scott, 2013, p. 145).

Regarding character design; children between the ages of 6-9 prefer animated series with fantasy characters. It was observed that children in the 10-12 age group preferred animated series with heroes in human form. Girls generally like cartoon characters with love, kindness, compassion and humor. Boys, on the other hand, prefer to watch characters with adventure, risk, struggle and war. (Ö. Demir, 2013, pp. 57,58). Babies mostly like animated series with animal characters. In terms of gender, productions with different hero profiles are broadcast. Girls are more interested in affectionate and humorous characters, while boys are more interested in animated series with superheroes. Animated series with fantasy characters and Japanese animated series (anime) are also preferred. Animated series created for children in the 6-9 age group are broadcast in accordance with the concrete thinking stage, while animated series depicting more complex moods in accordance with abstract thinking skills are broadcast for older children in the 10-12 age group (Ö. Demir, 2013, p. 66).

2.2.4. Child Development Stages

Human development is divided into prenatal and postnatal periods. The postnatal period is divided into five: neonatal period (0-4 weeks), infancy (4 weeks-2 years), early childhood (2-6 years), late childhood (6-11 years for girls, 6-13 years for boys), adolescence (11-20 years for girls, 13-20 years for boys) (Yavuzer, 1990, p. 26).

Within the scope of the subject of this thesis, the periods of late childhood and adolescence, which are the periods in which middle school students are in, will be mentioned.

2.2.4.1. Late Childhood Development

Children in the 10-11 age group are normally in the fourth and fifth grades of primary school (Doğan, 2007, p. 159).

Physical Development: The child continues to grow taller and increase in weight, but the rate of development has decreased compared to the previous and subsequent periods. They are interested in games and sports activities. Boys are interested in aggressive games involving shows of strength, courage and competition, while girls are interested in fun team games. They are interested in team games. The interests of children in the fifth grade are more realistic (Doğan, 2007, pp. 161,160).

Cognitive Development: Cognitive development is the mental activities that enable individuals to understand and learn about the world around them (Özdemir et al., 2012, p. 574).

Children between the ages of 7-11 are in the "Concrete Operational Stage". In this period, logical thinking and concepts such as number, time, size, space, distance and volume begin to be established. In this period, children can understand the principle of conservation because they can reverse concrete operations. Mental abilities are approaching those of adults but abstract thinking is not fully developed. Children at this age develop the ability to "group". Until the age of 9, children have difficulty understanding classification relationships. During this period, children begin to think logically. This helps to create an important emotional balance. Children in this period

can use the perspective of others. They begin to acquire different skills that they are curious about or think about. The language of children in this period develops rapidly, sometimes close to that of an adult. The child can grasp differences and similarities. Towards the end of this period, the child's ability to solve problems on his/her own develops significantly. Finding this power in himself/herself and trying to do the best when doing something is similar to adult behavior (Yavuzer, 1990, pp. 109,110,111,112).

A child aged 10, 11 can understand time, place and some historical events. Distinguishing sounds is the same as adults. Real cooperation and mutual understanding and help in behavior are seen in 11, 12 year olds. The concept of rules develops, but they also believe that rules can be changed if necessary. At the age of 11, they can express in speech what they can only accomplish with a verb at the age of 7 (Doğan, 2007, pp. 163,164).

The interests of 10-11 year olds are expanding. They may be interested in science and technology, countries and ways of life in the past. They prefer heroic stories, books about traveling and the way of life of people in other places. Boys are interested in nature and mysterious subjects. At the end of this stage, interests such as music, painting and theater emerge (Doğan, 2007, pp. 170,171). Children under 7 years of age cannot fully comprehend the story of the movie, and they begin to follow the content of the program they watch in this stage. Violent content can cause psychological problems for children who start to be affected by media content at an adult level during this period. With the development of abstract thinking, children try to capture the images on television as close to adults. Violent elements in animations are perceived as unrealistic. Heroes who die and come back to life, bombs and explosions become ordinary. This can lead to desensitization (Ö. Demir, 2013, p. 159).

Social Development: The child in this stage is in a class, friend and play group and as in adolescence, this situation leads them to communicate with their friends. There are social characteristics seen in children in this period. Easy to be influenced; they think that they have the same desires as other children. This is the most easily influenced period in life. Oppositionalism; opposition to the views of older children as opposed to their peers. Competition; conflicts between group members, with other groups and other social institutions. A sense of rivalry can often lead to fights.

Responsibility; children who take some responsibilities at home are successful in adaptation and can play a leading role in groups (Yavuzer, 1990, pp. 112,113).

Moral Development: According to Piaget, until the age of 7, children have difficulty understanding the point of view of others. According to Kohlber, between the ages of 6-9, children accept other people's interests along with their own interests. At the age of 10-15, children and adolescents begin to take into account the opinions of others and the rules of the society they live in (Yavuzer, 1990, pp. 118,119).

2.2.4.2. Adolescence Stage (11-20 years for girls, 13-20 years for boys)

Adolescence is the period of transition from childhood to adulthood. Development and maturation occur in biological, psychological, social and cognitive areas. On average, girls mature two years earlier than boys (Yavuzer, 1990, p. 261).

Physical Development: This period is the transition period to adulthood in many respects. Physiologically, the most intense growth and development is usually experienced between the ages of 12-16. Family, friends, society, television or celebrities may be effective in the formation of the ideal body image of the adolescent (Koç, 2004, p. 234).

Cognitive Development: "The Formal Operational Stage" begins after the age of 11 and logical thinking reaches the adult level in this period (Yavuzer, 1990, p. 266). The adolescent can see different sides of situations. Thanks to the development of abstract thinking, they become interested in abstract subjects. At this stage the child begins to understand the differences in the world. They begin to think about concepts such as existence, morality and justice. In this period, the child begins to solve abstract problems and perform mental operations (Özdemir et al., 2012, p. 586).

According to Piaget, formal operations are formed as a result of cooperation with other people. At the age of 11-12, the child reaches the capacity to understand that the rules of the game emerge as a result of the agreement of people. The child's understanding develops and can make predictions and assumptions. Children begin to understand each other and others' points of view better. The adolescent begins to look critically at themselves or the groups they belong to. Whereas the child has the idea that

the customs of society are immutable, the adolescent realizes that they are created by adults. Around the age of 12, children begin to reason and argue under certain conditions (Yavuzer, 1990, pp. 266,267).

Emotional Development: In this period, emotional intensity and instability are observed. They may experience emotional fluctuations such as timidity, excessive daydreaming, uneasiness, desire to be alone, quick excitement. They may have anxiety about the future. The problems they experience may vary according to their age group, school attendance, family attitudes, individual intelligence and acceptance (Koç, 2004, p. 235).

Social Development: Due to cultural differences in societies, adolescents should be handled in relation to the culture of the society in which they live. In general, adolescents have thoughts, feelings and behaviors specific to the period they are in. The main characteristics of this period are; quickly established and broken relationships, attracting attention, trying to have a role, emotional enthusiasm and outbursts, and standing out in society. During adolescence, which can also be interpreted as the years of social development and adaptation, adolescents need to gain respectability in society. Social adaptation develops through certain experiences. The individual tries to organize activities with people of their own kind. The childish behavior of individuals is replaced by mature behaviors and attitudes and they learn to be on their own without the help of family or teacher. In order for this period to be successful, it is important that the child is well prepared before this period. Being in a loving and safe, independent family environment and having the opportunity for experience are important for readiness. Towards the end of adolescence, maturity in social behavior is observed. They attach importance to the group they are in, they are in harmony with the group in terms of appearance, behavior and ideas. Between the ages of 11-20, the children try to find out who they are, what they value and what their purpose is. In this direction, they look for role models. They shape their personality through identification. Identification, which starts with the people in the family and expands to the people, thoughts and culture around them, is a process that includes thoughts, behaviors, attitudes and actions that the adolescent adopts intentionally or unintentionally. The cultural and economic characteristics of the society in which identification takes place form the personality and shape the concepts of autonomy and responsibility. In general, 12-15 years of age is referred to as the negative phase, while 16-21 years of age is referred to as the positive

phase. At the age of 14, a more extroverted structure is seen against the timidity seen at the age of 13. In a comparison of 13 and 14 year old adolescents, it was stated that 13 year olds were more serious and careful. At 14, the adolescent is cheerful and outgoing. They have a more mature attitude towards adults and family members. Although they may be critical, family ties are strengthened. They try to understand other people's thoughts better. Compared to 13-year-olds, they make more objective decisions. 14-year-olds have a wider circle of friends. They are attached to the groups they are in. Boys tend to choose friends from their own gender and girls tend to choose close friends with personalities close to their own. Social activities such as sports and music bind girls together. At the age of 14, logical and realistic thinking increases (Yavuzer, 1990, pp. 275,276,277,278,279).

In this stage, children can take the characters they see on television as role models and follow them in terms of their behavior, life and clothing styles. Children can seek answers to their questions about who they are and what they will do through social media (Ö. Demir, 2013, p. 160).

Moral Development: Adequate cognitive skills are required for a full grasp of moral assumptions based on abstract operations. This begins with adolescence. During adolescence, the external environment asks the adolescent to find the truth. This accelerates the development of internal control power and conscience instead of external control power (Koç, p. 236). At this age, the concepts of right and wrong are well developed, they try to be fair and honest, and their sense of responsibility has developed. Although the influence of the group of friends they are in is high, the influence of their families continues in terms of religious views and social knowledge. Behaviors such as disobeying elders, lying and tendency to commit crimes may increase (Doğan, 2007, p. 176).

Interests: At the age of 8, gender is an important factor in children's interest in reading. Girls may read more. Travel, adventure, geography, stories about the early ages are topics of interest. Children still like to read animal and fairy tales. They start to enjoy humor. 9-10 year olds are interested in scouting, adventure, horror stories, funny content, gadgets and inventions, the lives of celebrities. 11-year-olds are interested in adventure and excitement. Boys like science and invention and girls like topics about family and school life. 12-year-olds are interested in history and mythical

heroes. Girls may be interested in love stories (Yavuzer, 1990, p. 190). In 11-12 year old children, interests differ according to gender.

In the field of theater; for children between the ages of 7 and 11, plays that include the right and wrong of moral and social rules can be included; after the age of 12, plays that include more complex, cultural and social issues can be included because adolescents' comprehension abilities reach the adult level (Yavuzer, 1990, p. 216). In terms of interest in movies, young children, regardless of gender, enjoy entertaining movies and movies with animal heroes. Starting at the age of 6, the difference in gender preferences increases towards adolescence. Boys like adventure, war; girls like dance, song, animals, comedy (Yavuzer, 1990, p. 218).

Children's likes, interests and preferences change according to their developmental stages and ages. This change also affects the choice of animations that children watch. Within the scope of this thesis, the preferences and likes of fifth, sixth, seventh and eighth grade students in middle school on animated series in televisions and the relationship of these findings with animation design will be examined.

3. RESEARCH

3.1. Research Aim

Field research was conducted for the purpose of this thesis. Survey method, which is a quantitative method, was used. Regarding the thesis, a survey was conducted with middle school students between 16.01.2023-23.05.2023. With the questionnaire applied in this quantitative research, it was tried to determine the practices of middle school students in watching animated series, their preferences, thoughts, likes and issues they pay attention to about animated series. Animations have design processes. It was tried to determine how children's preferences are related to these processes. It is important to learn the animation tendencies of these children, who are in the transition period to adolescence and to determine their awareness on this issue. In this way, it can be ensured that the animated series produced are made for the likes of children.

3.2. Research Scope

The research was conducted in 2023 on the relationship between middle school students' preferences about animated series and the design processes of animated series. In the thesis, children's preferences, likes and opinions were determined through a survey. The relationship between the data obtained and the design process of animation was examined. The survey data were collected between 16.01.2023-23.05.2023.

The survey was conducted with 132 fifth, sixth, seventh and eighth grade students living in different districts of İstanbul.

The main hypothesis are as follow:

Middle school students prefer to watch animated series.

There is a relationship between middle school students' preferences and likes about animated series and the design features of animation.

Preferences and likes vary between age groups.

Preferences and likes vary between genders.

In this research, adolescents are taken as the primary research age. Regarding children's schools, there was no distinction between public and specific schools. Children were not asked about their schools. Different children from different districts were reached through the snowball method. Participants attended from 25 districts in the province of Istanbul in total.

3.3. Importance of the Research

In the literature, there are many studies examining the relationship between animation and children from different perspectives. There are studies on the effects of animation on children in various subjects or which animated series and characters they prefer. The studies generally cover pre-school or primary school levels (İnce, 1991; Demir, R., 2019; Adak Özdemir and Ramazan, 2013, Arslan, 2013, Aral, Ceylan and Bıçakçı, 2011; Bedekar and Joshi, 2020; Cerrah Özsevgeç, L., Saka, 2016; Cengiz, Küsmüş and Ramazan, 2020; Demir, Ö., 2013; Güney, 2019; Habib and Soliman, 2015; Kaplan, 2021; Karaca, 2019; Kaymak, 2020; Koç, 2019; Malatyaloğlu, 2014; Muslu, 2015; Namlı Altıntaş, 2016; Oral Paksoy and Arslan, 2021; Şahin, 2017; Temizyürek and Acar, 2014; Üzer, 2019; Yalçın et al., 2003; Yaşar Ekici, 2015; Yeten, 2022). The number of studies examining older age groups such as middle and high school is low. At the same time, there are also few studies that try to determine children's appreciation of the design elements of animations. Therefore, it is important to determine whether middle school children watch animated series, what they watch, their preferences, the reasons why children like animated series, and their thoughts about the design processes of animation. Investigating the relationship between the findings obtained and the design processes of animations provide important information in terms of both literature and field studies.

3.4. Methodology

3.4.1. The Methodology of the Research

In this research, the perceptions of middle school students about animated series were tried to be determined. The relationship between these results and animation design processes was analyzed. This research is a quantitative research. The survey method was used to determine the perceptions of middle school students. Snowball sampling and purposive sampling methods were used to reach the students. Volunteers who were accessible via social media and face-to-face participated in the survey. Students and parents forwarded the questionnaire to people who were eligible for the survey.

Descriptive research method was used. Descriptive research is a type of research that describes an event qualitatively or quantitatively. It defines the event or situation that existed in the past and present as it exists. Its aim is to reach an accurate description of the universe or an unbiased sample. In this research model, the researcher is a passive observer and does not intervene. Face-to-face and telephone interviews and surveys are among the most frequently used information gathering tools. Descriptive problems constitute the first stage of understanding and describing events, so descriptive research makes an important contribution to science and practice (Balci, 1989, pp. 412,413,414).

3.4.2. Participants of the Research

Fifth, sixth, seventh and eighth grade students residing in İstanbul participated in the study. A total of 132 children participated in the study and 48,5 percent of these children were boys and 51,5 percent were girls. 36 of the students participating in the research are in the fifth grade, 32 in the sixth grade, 21 in the seventh grade, and 43 in the eighth grade.

3.4.3. Data Collection Tools

One of the crucial parts of research is the method of collecting data and information. The data source of research on social studies is human beings. The survey method is a form of data collection from the primary source that obtains information from people (Odabaşı, p. 81). The survey method, which is one of the methods used to obtain information from people in scientific research, has been developed to obtain information on various subjects in a planned and standardized manner and is frequently used in sociological research (Oğur & Tekbaş, 2003, p. 336).

The "Questionnaire on Secondary School Students' Likes and Thoughts about Animated Series" used in the research consists of 6 sections. It consists of 5 demographic questions, 8 multiple choice questions, 2 classical questions and 28 Likert scale questions. The first 2 sections of the survey consist of consent. Then, demographic information is requested in the 3rd section. The 4th section consists of questions about animated series viewing preferences and scenario design. It includes classical, multiple choice and Likert scale question types. Section 5 consists of classical, multiple choice and Likert scale question types and is related to character design. Section 6 includes Likert scale questions about color, sound and music. There is an additional area where children can express their opinions about the survey if they wish.

A literature review was utilized in the creation of the survey and the questions were prepared in accordance with the research on the principles of animation design. Experts in the field of psychology and animation were consulted.

3.3.4. Data Collection

Within the scope of the research, a survey was conducted to determine the opinions of the students. Data were collected between 16.01.2023-23.05.2023. Snowball and purposive sampling methods were used. In purposive sampling, situations rich in information are selected for the purpose of the research and detailed research is carried out. It is used in cases that meet certain characteristics or meet certain criteria (Koç Başaran, 2017, p. 490). In this research, the perceptions of middle school students about animated series were tried to be determined and students

who were in middle school period were studied among children. In snowball sampling, one person is initially reached, then with the help of the person reached, other people are interviewed and the sample is formed in a chain. It can be used especially in examining rare situations (Kılıç, 2013, pp. 44,45). Within the scope of the research, a survey was conducted to determine the opinions of the students. In accordance with snowball sampling, students and parents forwarded the survey to each other. They ensured the growth of the sample by forwarding the survey to the students they knew, who were middle school students in accordance with the criteria of the research.

The survey was delivered to students via social media sites or face-to-face. The survey was created on Google Form and delivered to the students online. In accordance with the sampling method, students and parents also sent the survey to each other. Before starting the survey, the participants were informed about the subject, content, confidentiality conditions and voluntary nature of the research and could start the survey by filling the request box first for parents and then for children. After the information on name, surname, gender, age, class and district of residence, the survey started with questions about the animated series.

3.3.5. Data Analysis

Statistical Method

IBM SPSS 26.0 package program was used in the statistical analysis of the study. Descriptive statistics (frequency, percentage, mean, standard deviation) of the demographic data of the middle school students participating in the research and their answers to the survey questions about animated series viewing habits were calculated. Chi-square test was used to compare the answers of the participant students to the survey questions according to demographic data. All statistical analyzes were evaluated at 95% confidence interval and significance was evaluated at $p < 0.05$ level.

3.4. Limitations of Research

The research was conducted only with students residing in İstanbul. The research was exclusively carried out with middle school students. The survey focused only on children's animation preferences. A total of 132 students were reached in the study. Students were not asked about the school they attended. Therefore, the differences between specific and public schools could not be analyzed.



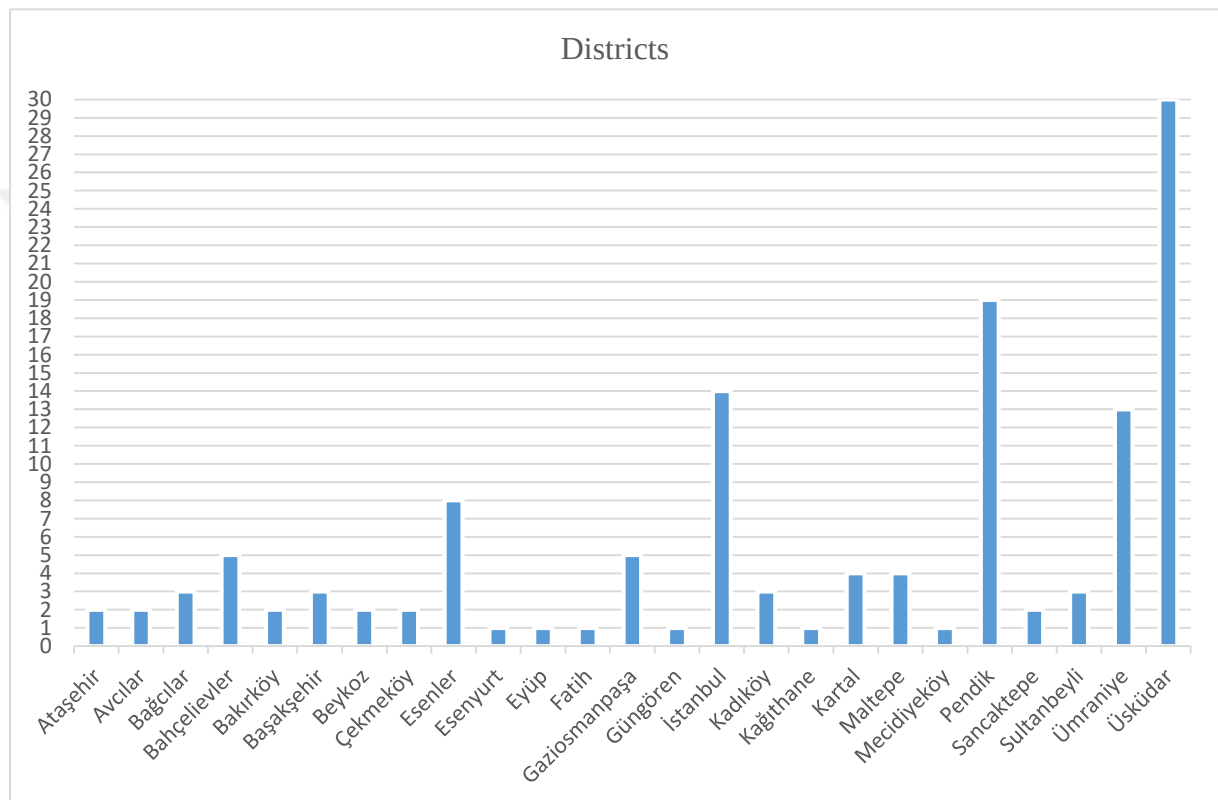
4. FINDINGS

This section presents the research findings and statistical analysis.

In the table below, the districts where the students live are tabulated.

Figure 1

Participants' Places of Residence



132 students from 25 different districts in Istanbul participated in the survey.

Üsküdar was the district with the highest number of participants. 14 people did not specify their district of residence and referred to it as "İstanbul".

Demographic information of the students is given in the table below.

Table 1*The distribution of participants' demographic characteristics*

Demographic data (n=132)	Ort.±SS ve ya n (%)
Age	12,02± 1,3
Gender	
Boy	64 (48,5)
Girl	68 (51,5)
Grade	
5.Grade	36 (27,3)
6.Grade	32 (24,2)
7.Grade	21 (15,9)
8.Grade	43 (32,6)
On average, how many days a week do you watch television animated series?	
1-2 days in a week	31 (23,5)
Less than 1-2 days in a week	60 (45,5)
3-4 days in a week	13 (9,8)
5-6 days in a week	8 (6,1)
Everyday	20 (15,2)
On average, how many hours do you watch television animated series in a day?	
0-1 Hour	95 (72)
2-3 Hours	29 (22)
4-5 Hours	3 (2,3)
More than 6 hours	5 (3,8)
In which medium do you watch tv animated series the most?	
Cinema	4 (3)
Tablet	12 (9,1)
Mobile phone	31 (23,5)
Television	85 (64,4)
Do you find the duration of the tv animated series you watch sufficient?	
Yes	96 (72,7)
No	36 (27,3)
Which themed tv animated series do you like the most?	
Science-fiction	22 (16,7)
Emotional	2 (1,5)

Legendary	10 (7,6)
Educational	2 (1,5)
Fantastic	8 (6,1)
Comedy	27 (20,5)
Adventure	61 (46,2)
For what reason do you prefer to watch tv animated series the most?	
For fun	54 (40,9)
Because i like the subject matter	17 (12,9)
Just out of curiosity	10 (7,6)
To pass the time	51 (38,6)
How do you think a animated series should be in terms of content?	
Entertaining	56 (42,4)
Both entertaining and teaching	72 (54,5)
Didactic/Teaching	4 (3)

A total of 132 children participated in the research, with 48.5% being boys and 51.5% girls. Among the participating students, 27.3% are in the fifth grade, 24.2% in the sixth grade, 15.9% in the seventh grade, and 32.6% in the eighth grade.

Of the middle school students participating in the research, 23.5% watch animated series '1-2 days a week,' 45.5% 'less than 1-2 days a week,' 9.8% '3-4 days a week,' 6.1% '5-6 days a week,' and 15.2% watch animated series 'every day.'

In response to the question about the daily duration of watching animated series, it was found that 72% of students watch '0-1 hour,' 22% watch '2-3 hours,' 2.3% watch '4-5 hours,' and 3.8% watch 'more than 6 hours' of animated series. Regarding the viewing platforms, 3% of students watch animated series in theaters, 9.1% on tablets, 23.5% on phones, and 64.4% on television. While 72.7% of students find the duration of the animated series they watch sufficient, 27.3% do not find it sufficient. In terms of genre preferences, 16.7% of students like science fiction, 1.5% emotional, 7.6% legendary, 1.5% educational, 6.1% fantasy, 20.5% comedy and 46.2% adventure-themed animated series.

Of the middle school students participating in the research, 40.9% watch animated series for entertainment, 12.9% because they like the subject, 7.6% out of curiosity, and 38.6% to pass the time. Regarding the content, 42.4% of students find cartoon content

entertaining, 54.5% find it both entertaining and educational, and 3% believe it should be educational.

The table below shows the statistical findings of the students' answers to the questionnaire.

Table 2

The distribution of responses from participating middle school students to survey questions

Anket soruları (n=132)	n (%)
I like animated series more when there is curiosity and excitement	
Strongly disagree	16 (12,1)
Disagree	5 (3,8)
Neither agree or disagree	8 (6,1)
Agree	48 (36,4)
Strongly agree	55 (41,7)
When things get complicated and then resolved in animated series, it makes me wonder and excites me	
Strongly disagree	14 (10,6)
Disagree	20 (15,2)
Neither agree or disagree	21 (15,9)
Agree	45 (34,1)
Strongly Agree	32 (24,2)
I will be happy if the problem is solved at the end of the animated series	
Strongly disagree	24 (18,2)
Disagree	14 (10,6)
Neither agree or disagree	23 (17,4)
Agree	35 (26,5)
Strongly Agree	36 (27,3)
I like simple and understandable animated series	
Strongly disagree	32 (24,2)
Disagree	41 (31,1)
Neither agree or disagree	29 (22)
Agree	18 (13,6)
Strongly Agree	12 (9,1)
I like complex, detailed and mysterious animated series	

Strongly disagree	16 (12,1)
Disagree	12 (9,1)
Neither agree or disagree	18 (13,6)
Agree	35 (26,5)
Strongly Agree	51 (38,6)

Survey questions (n=132)	n (%)
Animated series should contain positive messages	
Strongly disagree	24 (18,2)
Disagree	11 (8,3)
Neither agree or disagree	25 (18,9)
Agree	37 (28)
Strongly Agree	35 (26,5)
I don't like slang in animated series	
Strongly disagree	31 (23,5)
Disagree	20 (15,2)
Neither agree or disagree	23 (17,4)
Agree	18 (13,6)
Strongly Agree	40 (30,3)
I do not like violence in animated series	
Strongly disagree	31 (23,5)
Disagree	20 (15,2)
Neither agree or disagree	19 (14,4)
Agree	25 (18,9)
Strongly Agree	37 (28)
Which types of characters do you like to watch in animated series?	
Surreal characters	49 (37,1)
Animal characters	17 (12,9)
Human characters	60 (45,5)
Object characters (like cars)	6 (4,5)
I empathize with the characters in animated series	
Strongly disagree	21 (15,9)
Disagree	22 (16,7)
Neither agree or disagree	32 (24,2)
Agree	33 (25)
Strongly Agree	24 (18,2)

I like the characters in animated series more if they are similar to me

Strongly disagree	17 (12,9)
Disagree	23 (17,4)
Neither agree or disagree	26 (19,7)
Agree	28 (21,2)
Strongly Agree	38 (28,8)

The main character in animated series should be perfect and invincible

Strongly disagree	38 (28,8)
Disagree	43 (32,6)
Neither agree or disagree	21 (15,9)
Agree	13 (9,8)
Strongly Agree	17 (12,9)

I like good characters in animated series

Strongly disagree	19 (14,4)
Disagree	12 (9,1)
Neither agree or disagree	48 (36,4)
Agree	33 (25)
Strongly Agree	20 (15,2)

Survey questions (n=132)**n (%)****I don't like bad characters in animated series**

Strongly disagree	35 (26,5)
Disagree	36 (27,3)
Neither agree or disagree	32 (24,2)
Agree	21 (15,9)
Strongly Agree	8 (6,1)

Characters in animated series should look good and be cool

Strongly disagree	17 (12,9)
Disagree	41 (31,1)
Neither agree or disagree	29 (22)
Agree	28 (21,2)
Strongly Agree	17 (12,9)

Characters in animated series can be ordinary

Strongly disagree	23 (17,4)
Disagree	15 (11,4)
Neither agree or disagree	21 (15,9)

Agree	44 (33,3)
Strongly Agree	29 (22)

I like characters that have flaws or can make mistakes

Strongly disagree	20 (15,2)
Disagree	11 (8,3)
Neither agree or disagree	32 (24,2)
Agree	44 (33,3)
Strongly Agree	25 (18,9)

The most important thing for me is how the character looks, i.e. physical characteristics

Strongly disagree	30 (22,7)
Disagree	45 (34,1)
Neither agree or disagree	36 (27,3)
Agree	16 (12,1)
Strongly Agree	5 (3,8)

The most important thing for me is the character's personal characteristics

Strongly disagree	18 (13,6)
Disagree	15 (11,4)
Neither agree or disagree	34 (25,8)
Agree	36 (27,3)
Strongly Agree	29 (22)

I like to get to know the characters in animated series (what they like, what they have been through, etc.)

Strongly disagree	15 (11,4)
Disagree	17 (12,9)
Neither agree or disagree	31 (23,5)
Agree	33 (25)
Strongly Agree	36 (27,3)

The clothes of the characters are important to me

Strongly disagree	24 (18,2)
Disagree	32 (24,2)
Neither agree or disagree	30 (22,7)
Agree	24 (18,2)
Strongly Agree	22 (16,7)

Survey questions (n=132)

n (%)

Characters should have their own accessories (hats, masks, capes, etc.)

Strongly disagree	20 (15,2)
Disagree	25 (18,9)
Neither agree or disagree	24 (18,2)
Agree	35 (26,5)
Strongly Agree	28 (21,2)

The use of color in animated series is important

Strongly disagree	17 (12,9)
Disagree	12 (9,1)
Neither agree or disagree	17 (12,9)
Agree	45 (34,1)
Strongly Agree	41 (31,1)

**The colors used in animated series can remind some emotions or situations
(White color is goodness, black color is evil, red color is excitement...)**

Strongly disagree	23 (17,4)
Disagree	17 (12,9)
Neither agree or disagree	18 (13,6)
Agree	47 (35,6)
Strongly Agree	27 (20,5)

Backgrounds and locations in animated series are important to me

Strongly disagree	19 (14,4)
Disagree	10 (7,6)
Neither agree or disagree	29 (22)
Agree	43 (32,6)
Strongly Agree	31 (23,5)

Objects used in animated series attract my attention

Strongly disagree	14 (10,6)
Disagree	14 (10,6)
Neither agree or disagree	23 (17,4)
Agree	46 (34,8)
Strongly Agree	35 (26,5)

The voices in animated series are important to me (a baby character sounds babyish, an old character sounds old, etc.)

Strongly disagree	18 (13,6)
Disagree	8 (6,1)
Neither agree or disagree	12 (9,1)
Agree	46 (34,8)
Strongly Agree	48 (36,4)

Music makes animated series more impressive

Strongly disagree	19 (14,4)
Disagree	8 (6,1)
Neither agree or disagree	21 (15,9)
Agree	43 (32,6)
Strongly Agree	41 (31,1)

I like and sing along to some animated series music

Strongly disagree	24 (18,2)
Disagree	12 (9,1)
Neither agree or disagree	15 (11,4)
Agree	44 (33,3)
Strongly Agree	37 (28)

It was observed that children in this age group prefer animated series that contain curiosity, excitement and mystery. According to their answers, it can be thought that instead of simple and understandable animated series, they like animated series with a more detailed plot, where the events are first complicated and then solved. Although the majority of children think that animated series should contain positive messages, the fact that some of them disagree or remain undecided shows that they do not necessarily think that animated series should contain positive messages. It can be concluded that although the majority of the children agreed with the dislike of slang words and violence in animated series, a large number of them disagreed, that is, they did not consider it important.

In the survey conducted, children mostly preferred human and then surreal characters. It has been observed that children mostly responded positively to the questions of empathizing with the characters in animated series and liking the characters they resemble themselves. Nevertheless, there is a high rate of those who are undecided and have no such opinion on this issue.

Regarding the characters in animated series, it was observed that children liked characters who could make mistakes, who were not perfect, that they thought that characters did not necessarily have to look perfect, beautiful and cool, and that whether a character was good or bad was not the only reason for liking or disliking a character. It was revealed that children did not only pay attention to the physical characteristics

of the characters, but also cared about their personal characteristics and lives. Children stated that they did not mind the clothes of the characters. The majority of children preferred characters to have unique accessories.

Children gave highly positive answers about the use of color and music in animations, that colors can evoke certain emotions and that the voices should be appropriate. It is understood that this age group cares about the use of color and music in animations. It was found that children in this age group attached importance to the backgrounds, environments and objects used in animations.

Table 3

Survey questions with gender-based differences

Survey questions (%)	Erkek (n=64)	Kız (n=68)	p
On average, how many days a week do you watch television animated series?			
1-2 days in a week	13 (20,3)	18 (26,5)	0,048*
Less than 1-2 days in a week	23 (35,9)	37 (54,4)	
3-4 days in a week	9 (14,1)	4 (5,9)	
5-6 days in a week	5 (7,8)	3 (4,4)	
Everyday	14 (21,9)	6 (8,8)	
I like simple and understandable animated series			
Strongly disagree	20 (31,3)	12 (17,6)	0,018*
Disagree	15 (23,4)	26 (38,2)	
Neither agree or disagree	12 (18,8)	17 (25)	
Agree	7 (10,9)	11 (16,2)	
Strongly Agree	10 (15,6)	2 (2,9)	
I do not like violence in animated series			
Strongly disagree	20 (31,3)	11 (16,2)	0,019*
Disagree	14 (21,9)	6 (8,8)	
Neither agree or disagree	8 (12,5)	11 (16,2)	
Agree	10 (15,6)	15 (22,1)	
Strongly Agree	12 (18,8)	25 (36,8)	
Which types of characters do you like to watch in animated series?			
Surreal characters	17 (26,6)	32 (47,1)	0,013*
Animal characters	9 (14,1)	8 (11,8)	
Human characters	32 (50)	28 (41,2)	

Object characters (like cars)	6 (9,4)	0 (0)	
Characters should have their own accessories (hats, masks, capes, etc.)			
Strongly disagree	14 (21,9)	6 (8,8)	
Disagree	10 (15,6)	15 (22,1)	
Neither agree or disagree	11 (17,2)	13 (19,1)	0,029*
Agree	21 (32,8)	14 (20,6)	
Strongly Agree	8 (12,5)	20 (29,4)	

*: $p < 0,05$

The responses to the question 'On average, how many days a week do you watch animates series?' from middle school students participating in the study show a statistically significant difference based on gender (Chi-square test; $\chi^2=9.548$; $p < 0.05$).

There is a statistically significant difference in the responses of middle school students participating in the research to the statement 'I like simple and understandable animated series' based on their genders (Chi-square test; $\chi^2=11.925$; $p < 0.05$).

There is a statistically significant difference in the responses of middle school students participating in the research to the statement 'I do not like violence in animated series' based on their genders (Chi-square test; $\chi^2=11.744$; $p < 0.05$).

There is a statistically significant difference in the responses of middle school students participating in the research based on their genders to the question 'Which types of characters do you like to watch in animated series?' (Chi-square test; $\chi^2=10.806$; $p < 0.05$).

There is a statistically significant difference in the responses of middle school students participating in the research based on their genders to the statement 'Characters should have their own accessories (hats, masks, capes, etc.)' (Chi-square test; $\chi^2=10.798$; $p < 0.05$).

Other than these statements, there is no statistically significant difference in the responses of middle school students participating in the research based on their genders to other survey questions (Chi-square test; $p > 0.05$).

Table 4*Survey questions with grade-based differences*

Anket soruları n (%)	5.Sınıf (n=36)	6.Sınıf (n=32)	7.Sınıf (n=21)	8.Sınıf (n=43)	p
The main character in animated series should be perfect and invincible					
Strongly disagree	9 (25)	9 (28,1)	10 (47,6)	10 (23,3)	0,014*
Disagree	9 (25)	10 (31,3)	7 (33,3)	17 (39,5)	
Neither agree or disagree	2 (5,6)	8 (25)	1 (4,8)	10 (23,3)	
Agree	9 (25)	1 (3,1)	1 (4,8)	2 (4,7)	
Strongly Agree	7 (19,4)	4 (12,5)	2 (9,5)	4 (9,3)	
Backgrounds and locations in animated series are important to me					
Strongly disagree	4 (11,1)	6 (18,8)	3 (14,3)	6 (14)	0,03*
Disagree	1 (2,8)	2 (6,3)	5 (23,8)	2 (4,7)	
Neither agree or disagree	12 (33,3)	9 (28,1)	2 (9,5)	6 (14)	
Agree	13 (36,1)	11 (34,4)	7 (33,3)	12 (27,9)	
Strongly Agree	6 (16,7)	4 (12,5)	4 (19)	17 (39,5)	

*: p<0,05

There is a statistically significant difference in the responses of middle school students participating in the research to the statement 'The main character in animated series should be perfect and invincible' based on their grades (Chi-square test; $\chi^2=25.121$; $p<0.05$).

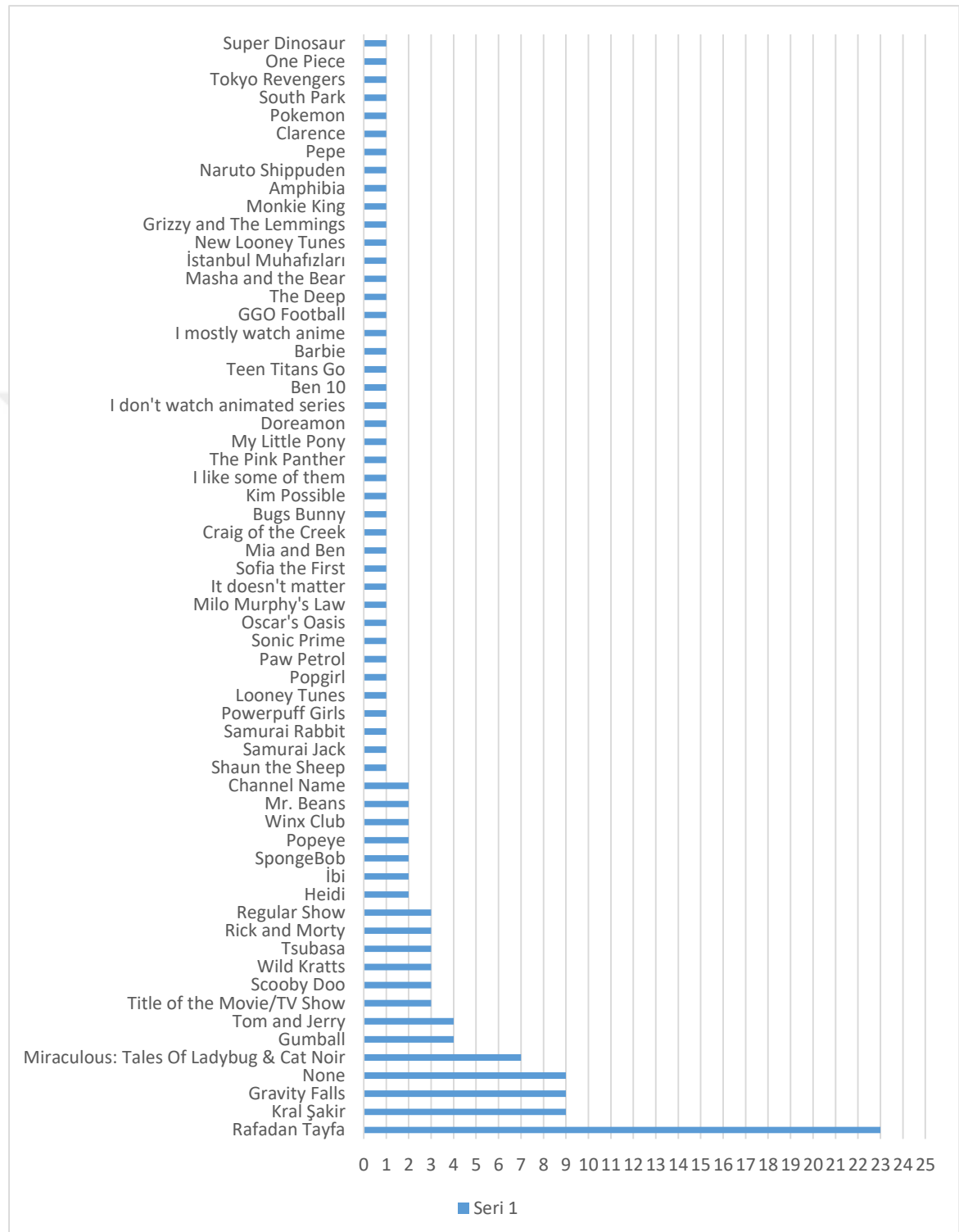
There is a statistically significant difference in the responses of middle school students participating in the research to the statement 'Backgrounds and locations in animated series are important to me' based on their grades (Chi-square test; $\chi^2=22.773$; $p=0.03<0.05$).

There is no statistically significant difference in the responses of middle school students participating in the research to other survey questions, aside from these statements, based on their grades (Chi-square test; $p>0.05$).

The responses to the question 'What is your favorite animated series in television?' are shown in the graph below.

Figure 2

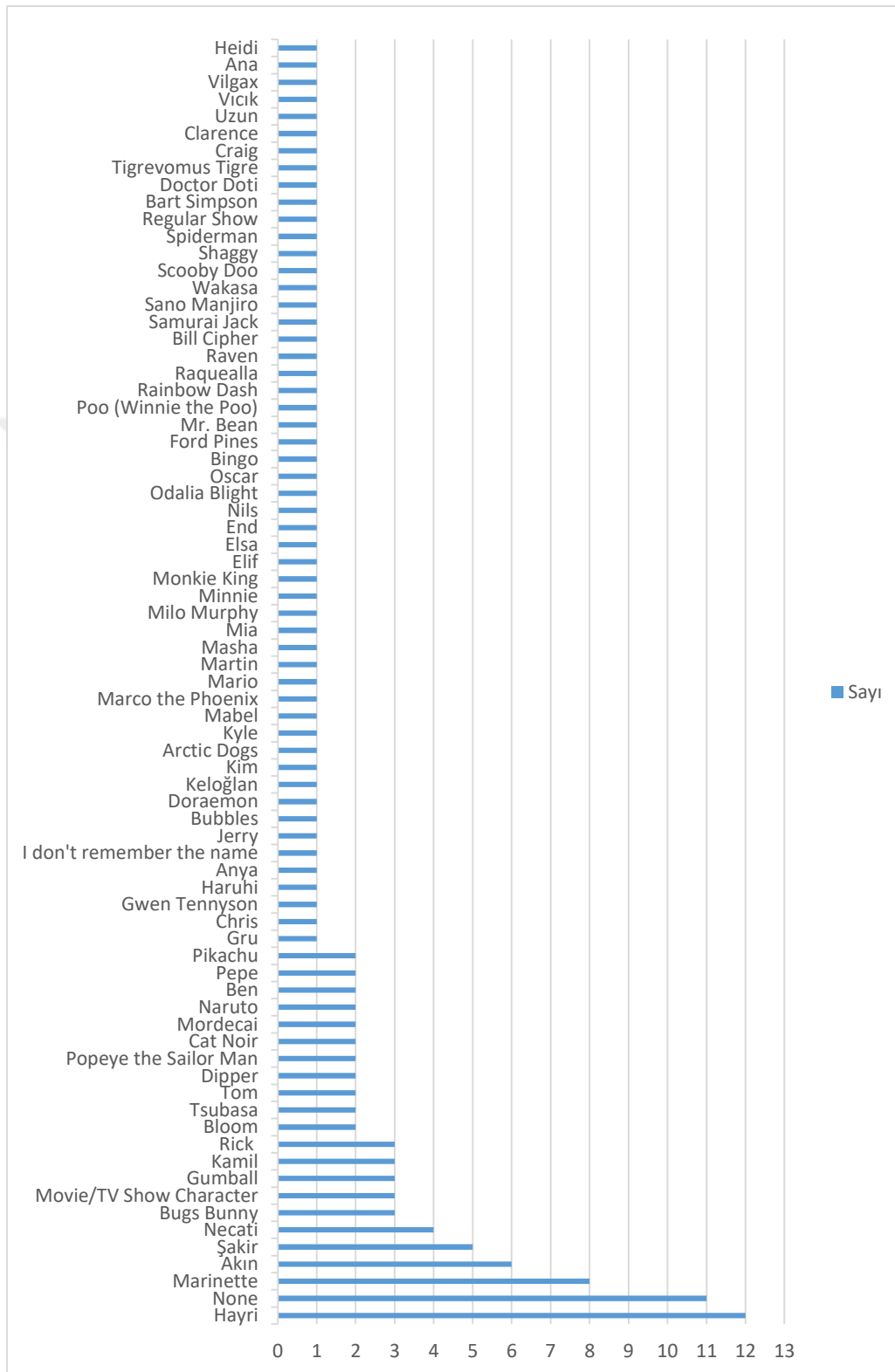
The names of the animated series that participants like



The responses to the question 'Who is your favorite animated series character?' are shown in the graph below.

Figure 3

The names of the animated series characters that participants like



Children's favorite animated series include the following: Rafadan Tayfa, Kral Şakir, Gravity Falls, Miraculous: Tales of Ladybug & Cat Noir. The answer "None" also received a high number of votes. Children's favorite animated series characters include the following: Hayri, Marinette, Akın, Şakir, Necati. The answer "None" also received a high number of votes.



5. RESULTS AND DISCUSSION

5.1. Results

As a result of the research, five statements were found to be different among middle school students according to gender. In the statement 'On average, how many days a week do you watch animated series?', while the majority of both male and female students watch animated series less than 1-2 days a week, the percentage of males who watch animated series every day is higher than females who watch animated series every day. Similarly, among males, the percentage of those who watch animated series 3-4 days a week is higher than the percentage of females who watch animated series 3-4 days a week. In this sense, it can be understood that boys watch animated series more than girls in the category of every day and 3-4 days a week.

In the statement, 'I like simple and understandable animated series', the percentage of strongly agree and strongly disagree responses of boys is much higher than that of girls, while the percentage of disagree responses of girls is higher than that of boys. It can be said that boys have a sharper opinion on both agreeing and disagreeing with this question than girls.

In the statement 'I do not like violence in animated series', the percentage of males strongly disagreeing and disagreeing is higher than that of females, while the percentage of females agreeing and strongly agreeing is higher than that of males. According to this result, it is concluded that boys do not have an opinion such as disliking the element of violence, while girls agree with the statement and dislike the element of violence.

In the statement 'Which types of characters do you like to watch in animated series?', girls prefer supernatural characters to a greater extent than boys, while male students, compared to girls (who have not chosen this option at all), prefer object characters (such as cars).

In the statement 'Characters should have their own accessories (hats, masks, capes, etc.)', the percentage of males strongly disagreeing is higher than that of females, while the percentage of females strongly agreeing is higher than that of males. According to this result, it can be said that female students care more about the accessories of the

characters. According to the results of the research, no difference was found between genders in the answers given other than these statements.

As a result of the research, there are two statements where there is a significant difference between the answers of middle school students between grades. In the statement 'The main character in animated series should be perfect and invincible', 5th-grade students predominantly chose agree and strongly agree options compared to others, while 6th and 8th-grade students preferred the undecided option to a greater extent. 7th-grade students predominantly are strongly disagree compared to other students, and 8th-grade students mostly are disagree compared to others. According to this result, it can be said that young children think that the main character should be perfect and invincible. One of the reasons for this may be the development of abstract thinking skills as children get older.

In the statement 'Backgrounds and locations in animated series are important to me', 7th-grade students predominantly chose the 'disagree' option compared to others, while 5th and 6th-grade students preferred the 'undecided' option to a greater extent than others. 8th-grade students mostly selected the 'strongly agree' option compared to other students. From this point of view, it can be concluded that 8th grade students, who are the oldest age group, care about the backgrounds and places in animated series and have more awareness about setting compared to other age groups due to their age and developmental period. According to the results of the research, no difference was found between the classes in the answers given other than these statements.

The other hypothesis of the research, which is that students have likes and preferences about the animated series they watch and the evaluation of these thoughts about the design elements of animation, will be made through the statements. It was observed that the students mostly answered "Less than 1-2 days a week" to the question "On average, how many days a week do you watch television animated series?", "1-2 days a week" was the second most preferred answer.

The most preferred answer to the question "On average, how many hours do you watch television animated series in a day?" is "0-1 hour", followed by "2-3 hours".

The answer to the question "In which medium do you watch tv animated series the most?" was television, followed by the telephone.

In the question "Do you find the duration of the tv animated series you watch sufficient?", children answered that they found it sufficient.

To the question " Which themed tv animated series do you like the most?", children answered adventure, followed by comedy and then science fiction. To the question " For what reason do you prefer to watch tv animated series the most?", children mostly answered "To have fun", followed closely by "To pass the time".

In response to the question " How do you think a animated series should be in terms of content?", the highest percentage of children answered both entertaining and instructive, while a close proportion answered only entertaining.

In the first of the Likert scale questions about the content of animated series, "I like animated series more when there is curiosity and excitement.", 41.7 percent of the children strongly agreed and 36.4 percent agreed. Children responded positively to this question at a high rate, indicating that they like and prefer the element of curiosity and excitement in animated series.

For the statement "When things get complicated and then resolved in animated series, it makes me wonder and excites me." 34.1 percent of the children agreed and 25.2 percent of the children strongly agreed. 58.3 percent responded positively to this question. It is seen that 27.3 percent of the children strongly agree and 26.5 percent agree with the item "I will be happy if the problem is solved at the end of the animated series." and 53.8 percent of the children responded positively to this statement.

To the question "I like simple and understandable animated series", 31.1 percent of the children disagreed and 24.2 percent strongly disagreed. In relation to another statement, "I like complex, detailed and mysterious animated series", 38.6 percent of the children strongly agreed and 26.5 percent agreed. In this sense, it is seen that the positive and negative answers given by the children to the questions are consistent and it is seen that children at this age prefer detailed, complex and mysterious animated series rather than simple, understandable animated series.

For the statement "Animated series should contain positive messages.", 28 percent of the children agreed and 26.5 percent strongly agreed. Those who were undecided and those who strongly disagreed were equal to each other and amounted to approximately 18 percent. In total, 54.5 percent of children responded positively to this

item. It can be said that most of the children think that animated series should contain positive messages, while a smaller group does not think that animated series should necessarily contain positive messages.

For the statement "I don't like slang in animated series.", 30.3 percent of the children strongly agree, while 23.5 percent strongly disagree is the second highest response. For the statement "I do not like violence in animated series.", 28 percent of the children answered "strongly agree" and 23.5 percent of the children answered "strongly disagree" as the second highest answer. Although the rate of those who answered positively in both answers is higher than the rate of those who answered negatively, the fact that the majority of the children answered negatively to this question by giving the second answer "strongly disagree" indicates that children expressed that they are not disturbed by the element of violence and slang words.

To the statement "Which types of characters do you like to watch in animated series?" 45.5 percent of the children answered human characters, 37.1 percent preferred surreal characters, 12.9 percent preferred animal characters and 4.5 percent preferred object characters.

In the statement "I empathize with the characters in animated series.", 43.2 percent of the children responded positively, 24.2 percent were undecided and 32.6 percent responded negatively. In general, it can be said that children agree with this statement, but the rate of those who are undecided is also high. In the statement related to the previous statement, "I like the characters in animated series more if they are similar to me." 28.8 percent of the respondents strongly agreed with this statement. Agree, undecided and disagree responses were given in close order. In total, 50 percent gave a positive answer and 30.3 percent gave a negative answer. Although children gave more positive answers and agreed with these two statements, the answers of those who were undecided should also be taken into consideration. To the statement "The main character in animated series should be perfect and invincible." 32.6 percent of the children disagreed and 28.8 percent strongly disagreed. The 3rd highest percentage is undecided.

In the statement "I like good characters in animated series.", 36.4 percent of the children were undecided, 25 percent agreed, 15.2 percent strongly agreed and 14.4 percent strongly disagreed. From this point of view, it can be said that children are

undecided about liking good characters, that is, they think that a character does not necessarily have to be good in order to like a character. Since the percentage of those who responded positively to this question was higher in total, it was seen that a large portion of them attach importance to this. Again, the percentage of those who said that there is absolutely no such relationship is also noteworthy. After answering the question about his favorite character, one of the children stated in parentheses that it was a bad character. Again, 27.3 percent of the children disagreed, 26.5 percent strongly disagreed, and 24.2 percent were undecided on the statement "I don't like the bad characters in animated series.", which is related and opposite to this question. In total, 53.8 percent of those who gave negative answers stated that they disagreed with this statement and that they liked the bad characters. The fact that the percentage of undecided respondents is also high can be concluded that being bad does not have a direct effect on children's liking of characters. The answers given to both questions were in the same direction and the children stated that there is no requirement for a character to be good in order to like them or bad in order to dislike them.

In the statement "Characters in animated series should look good and be cool." 31.1 percent of the children disagreed and 22 percent were undecided. In total, the percentage of those who disagree with this item is 44, while the percentage of those who agree is 34.1. Although there is not a big difference, it can be said that children do not necessarily think that characters should look good and be cool. For the statement "Characters in animated series can be ordinary." 33.3 percent of the children agreed, 22 percent strongly agreed and 17.4 percent strongly disagreed. In relation to the above statement, the fact that the majority of the children responded positively to this question with a rate of 55.3 percent shows that children think that characters can be ordinary. For the statement "I like characters with flaws or can make mistakes." 33.3 percent of the children agreed, 24.2 percent were undecided and 18.9 percent strongly agreed. While 52.2 percent of the children responded positively, 23.5 percent responded negatively. According to the statements above, it is seen that children think that characters may have flaws and may make mistakes. The answer "I am undecided", which received the second highest percentage in this statement, may indicate that some of the children do not have a clear idea or prejudice on this issue.

For the statement "The most important thing for me is how the character looks, i.e. physical characteristics." 34.4 percent of the children disagreed, 27.3 percent were

undecided and 22.7 percent strongly disagreed. The fact that the total percentage of those who responded negatively was 56.8, while the total percentage of those who responded positively was 15.9 and that the children who were undecided had the second highest percentage may indicate that children do not consider the physical characteristics of the characters as the most important criterion. For the statement "The most important thing for me is the character's personal characteristics." 27.3 percent of the children agreed, 25.8 percent were undecided and 22 percent strongly agreed. The high number of children who agreed in total may indicate that children attach more importance to character traits rather than physical traits, in relation to the previous question. The second highest percentage of undecided respondents may indicate that children do not have a clear opinion on this issue or that they attach the same importance to both.

In the statement "I like to get to know the characters in animated series (what they like, what they have been through, etc.).", 27.3 percent of the children strongly agreed and 25 percent agreed. From this point of view, it can be said that children want to get to know the characters, their lives and their ideas.

For the statement "The clothes of the characters are important to me.", 24.2 percent of the children disagreed, 22.7 percent were undecided, 18.2 percent strongly disagreed and 18.2 percent agreed. Although the percentage of those who gave negative answers to the question is higher in total, the percentage of those who gave positive answers is close. In this sense, it can be said that the majority of the children who participated in the survey do not care about the clothes of the character, while those who are undecided and those who agree with the statement show that they may care about the clothes. For the statement "Characters should have their own accessories (hats, masks, capes, etc.)." 26.5 percent of the children agreed, 21.2 percent strongly agreed, and 18.9 percent disagreed. The fact that the majority of children agree with this statement shows that children care about the accessories of their characters. The percentages of those who were undecided and those who gave negative answers in total may indicate that some children do not pay much attention to this. The fact that children agreed with the statement "The use of color in animated series is important." with a total of 65.2 percent shows that they care about and are aware of the use of color in animated series. In the statement "The colors used in animated series can remind some emotions or situations (White color is goodness, black color is evil, red color is

excitement...)" 56.1 percent of the children responded positively. This result again shows that children have some awareness about colors.

While 56.1 percent of the children responded positively to the statement "Backgrounds and locations in animated series are important to me.", 22 percent responded negatively. It can be said that a great majority of children care about backgrounds and environments. For the statement "Objects used in animated series attract my attention." while the percentage of those who gave positive answers in total was 61.3, the percentage of those who gave negative answers in total was 21.2.

Children responded positively to the statement "The voices in animated series are important to me (a baby character sounds babyish, an old character sounds old, etc.)." with a rate of 71.2 percent in total. Based on this answer, it can be concluded that children are careful about the voiceover, care about it and expect a voiceover that fits the character in different aspects such as age, characteristics, etc. In the statement "Music makes animated series more impressive.", children responded positively with a rate of 63.7 percent in total. It is seen that children responded positively and agreed with 61.3 percent in total to the statement "I like and sing along to some animated series music." As a result of these two related statements, it was seen that children stated that the use of music in animated series is important and that they like the music in animated series.

Children gave various answers to the question "What is your favorite animated series in television?". Rafadan Tayfa is the most favorite cartoon, written 23 times. Kral Şakir, Gravity Falls and None were written 9 times and Miraculous: Tales of Ladybug & Cat Noir was written 7 times. The fact that children answered "None" suggests that some children do not prefer to watch animated series during this period or that they do not have favorite animated series and watch them randomly. Some of the children wrote the channel name, some wrote the movie/series name, some wrote the anime name or that they watched "anime". It was also observed that children started to prefer options such as anime, movie and series in this period. Their developmental stage and age may have been effective in this regard.

The most popular answer to the question "What is the name of your favorite cartoon character?" was Hayri (12). After that, None (11), Marinette (8), Akın (6), Şakir (5), Necati (4) were among the most popular answers. The fact that children gave the

answer "None" may be due to the fact that children do not prefer favorite characters. Movie/series characters and anime characters are among the answers given. This may be one of the results of children's interest in different genres as they grow older.

5.2. Discussions

In this research, it was found that children mostly watch animated series 1-2 days a week and 0-1 hour a day on average. Some of the reasons for this situation might be that children's interest in animated series decreases as they grow older, and they choose different types of programs (series, etc.) or other activities. In relation to how many hours a day children watch animated series, in a study conducted in 1991 on the place and importance of animated series in the lives of 6-18 age group individuals, it was observed that children in the 7-12 age group gave the answer "Every day" with a rate of 64.9 percent, and "1-2 days a week" was the least preferred answer with 2.6 percent (İnce, 1991, p. 64).

According to a study on television viewing habits of primary school children, "watching television" was the second most popular answer with 64.6 percent in the distribution of students' leisure time activities. On weekdays, 27.4 percent chose 2 hours and 19.5 percent chose 1 hour, while 28.4 percent chose 5 hours or more and 20.8 percent chose 2 hours on weekends (RTÜK, 2006, pp. 11,12). According to the RTÜK research conducted in 2013, the genre that students preferred to watch the most was television series. The rate of those who watch animated series regularly is 11.2 percent, the rate of those who watch them occasionally is 35.7 percent and the rate of those who never watch them is 53.2 percent (RTÜK, 2013, p. 112). According to the 2018 research on children's new media usage habits and cyberbullying, television ranks after the internet, mobile phone, desktop computer/laptop with a rate of 31 percent. In the research, it was observed that the importance of television for students decreased compared to 2015. One of the most important reasons for this is that new media tools have become widespread, the internet can be accessed from anywhere at any time and offers many contents together, making it easier to access content. In the same study, it was determined that the average daily television viewing time of students was 1 hour 23 minutes on weekdays and 1 hour 47 minutes on weekends (RTÜK, 2018, pp. 10,11,12).

In another research conducted in 2012 on examining the effect of animated series on children's behaviors according to the opinions of mothers and conducted with a younger age group (preschool, first grade, second grade, third grade), it was seen that the maximum duration of children's animated series viewing time was 1 or 2 hours according to the statements of mothers (Adak Özdemir & Ramazan, 2012, p. 162). Based on this findings, it can be said that children's television viewing time and the time spent watching animated series on television have decreased. As a result of a research conducted by Cesur and Paker in 2007 with 7-12 age group on children's preferences for television programs, children preferred animated series the most with a rate of 41.6%. In terms of children's favorite programs, the rate of watching animated series increased with age, while the rate of watching animated series decreased after the age of 10 (Cesur & Paker, 2007, pp. 114,116).

Based on the results of the survey, it was observed that children prefer television the most when watching animated series. In İnce's study, 81.2 percent of children between the ages of 7 and 12 watch animated series mostly through television (İnce, 1991, p. 69). According to the research conducted by Özcan Demir in 2013 with fourth, fifth and sixth graders (10-12 age group) in his study on the evaluation of the effects of animated series broadcast on Turkish television on the socialization process of primary school children, as a result of the question about whether children like animated series or cinemas more, those who liked both were 23%, those who liked neither were 2%, those who preferred cinema were 36% and those who liked series were 34%. In the answers given, reasons such as the continuation of the series and the increasing excitement, effective sounds in the cinema and the giant screen were effective. Sixth grade students' answers that they knew the characters better due to the long length of the series suggested that they identified with the characters (Ö. Demir, 2013, pp. 229,230,231).

As a result of the survey, children stated that they found the duration of the animated series sufficient. According to İnce's research, 44.2 percent of children between the ages of 7 and 12 said that "more space should be given" and 36.6 percent said that it was sufficient (İnce, 1991, p. 85).

According to İnce's research, 36.7 percent of 7-12 year old children preferred adventure-journey theme, while 32.8 percent preferred science fiction themes. 11,12-

year-old children's interests may differ according to gender. While boys like adventure reading, girls like reading with dreamy and romantic content. In this period when the desire to read is high, they read biographies, history, animal stories, legends, books on nature and science, comics. They read for laughing. In the 13-14 age group, biographies can be useful as they are in search of heroes they can look up to. Boys are interested in sports, science books, adventure content. Girls like romantic works, detective and career stories, realistic works about pets, historical novels and works with subtle humor (Dilidüzgün, 2006, p. 123; as cited in Şirin, 2012, pp. 54,55). Also as a result of the survey, the most preferred animated series were adventure themed animated series, followed by comedy themed animated series. No difference was observed between genders in this question. Children start to be interested in abstract subjects with adolescence (Özdemir et al., 2012, p. 586). This development may enable children to like and prefer science fiction.

The survey results show that children stated that animated series should be both entertaining and instructive. According to a research conducted in 2018 on children's new media usage habits and cyberbullying, the most common reason for preferring television was "Because I like it/ To have fun/ To spend time/ Because it is important" with a rate of 25.9 percent (RTÜK, 2018, p. 86). Although animated series first emerged for entertainment purposes, it was later thought that they could also be used for educational purposes, and it was seen that educational animated series started to be made and this had positive results. However, when focusing only on being educational, children's interest decreased, so it was concluded that animated series should both entertain and educate (Karaca, 2019, p. 155).

In a research conducted by Altıntaş in 2016 on the values acquired and their role modeling from animations by students aged 9-11, children were asked what they watch animated series based on. In response, children mentioned image quality, the popular cartoon channel they watch and entertainment themes. Answers such as obtaining information, heroes close to them, peer influence were also seen. The question about why they like the animated series character was generally answered as role modeling. The related themes are leadership, warriorism, having supernatural powers, growing up, and being famous (Altıntaş, 2016, pp. 323,324). It was found that they preferred animated series that have a relationship with reality rather than fictional animated series. The fact that this age group is in the pre-adolescent stage may have an effect.

The participants, i.e. children between the ages of 9 and 11, have clear criteria for watching animated series. The visual elements used in the animated series, the animated series being funny and entertaining, the influence of family and friends are the reasons why children prefer animated series (Altıntaş, 2016, p. 327,328). From this point of view, it can be concluded that the children who participated in the survey do not like animated series that are only instructive, and a significant portion of them only want animated series with entertainment content. In the previous literature review, it was mentioned that animated series have functions such as educating and instructing while entertaining (Güler, 1989, p. 168,169). In animated series, it is important that the subject matter is suitable for the child's mental characteristics, entertaining and educational (R. Demir, 2019, p. 56).

Regarding the answer to the question whether an animated series should be simple or complex, as mentioned in the literature review, the script should be created according to the target audience. Older children can understand more complex scripts, while younger age groups can understand simpler scripts. Therefore, the subject, character, environment and narration method should be determined according to the age group (Abalı, 2013c). In accordance with the abstract thinking skills of children in the 10-12 age group, animated series depicting more complex moods are made (Ö. Demir, 2013, p. 66). Children's abstract thinking skills develop with adolescence and they start to be interested in abstract subjects (Özdemir et al., 2012, p. 586). As a result of this survey, it was seen that middle school students like and prefer more complex and detailed animated series due to their age. At the same time, in accordance with the 3-act structure of the story mentioned in the literature review, the fact that the story is first complicated and then solved seems to be adopted by the children.

According to the survey results, although the majority of the children stated that they disliked violence and slang, some of them disagreed with this item or did not express an opinion. Elements of violence in animated series are commonly shown and determine the content of some animated series (such as battles, chases, shootings, explosions). It may be a situation that children are used to or it may not be a negative criterion for them during their animated series preferences. Children between the ages of 7-12 perceive the scenes of violence they see on television as unrealistic and these scenes can become ordinary (Ö. Demir, 2013, p. 159). In a study conducted by Aral et al. with fourth and fifth grade students, in which children's television viewing habits

were examined according to age and gender, 10 and 11 year old children stated that slang words should not be used and should not contain violence at similar rates. When the distributions were analyzed, it was seen that boys preferred violent broadcasts more than girls (Aral et al., 2011, p. 492).

Children preferred human characters the most, followed by surreal characters. According to Bielli's 1997 study titled "European Children Talk About Animated Cartoons", it was observed that children in the 10-12 age group preferred cartoons with anthropomorphic characters. As a result of Demir's research, the rate of children's liking for human characters in general was 48%, the rate of liking for animal characters was 27% and the rate of liking for both was 27% (Ö. Demir, 2013, p. 231).

According to children's answers to questions about character design, it can be said that children think that the main characters may have flaws or may be defeated from time to time. It is important for children to see and watch characters they can relate to in terms of the emotions they will feel and the inclusion of characters of the same age for the target age group enables them to identify with them. The fact that the characters have a weakness is also important for the child to feel close to them (Abalı, 2013c).

In the literature review, it was mentioned that when designing a character, there is a physical, psychological and sociological structure. Physical characteristics are how the character looks, psychological characteristics are the character's inner world and sociological characteristics are the character's communication with the outside world and the way of life (Erdoğan, 2020, pp. 68,69). As a result of the survey, it was observed that children did not only pay attention to the physical characteristics of the characters, but also expected to have information about their inner world and life. The development of children's abstract thinking skills as they grow up and the production of animated series that contain complex moods in accordance with this is another important factor (Ö. Demir, 2013, p. 66).

According to Demir's study, the most important accessories of heroes are the tools that are related to their tasks and reveal their skills. When asked which of the tools used by the heroes they liked the most, children gave answers such as swords, watches, toys, bags, all features, babylade (Ö. Demir, 2013, p. 241). In Demir's study, when children were asked about the most favorite features of the clothes of superheroes in

animated series, appearance was listed with 58%, accessories with 16%, super features with 13%, and originality with 4% (Ö. Demir, 2013, p. 238). Children's responses to the character design section show that they generally think about characters in a more realistic and multidimensional way due to their growing age and the period they are in.

The responses to the questionnaire show that children care about and are aware of color. According to Demir's study, when the color factor in children's liking of animated series was examined; it was seen that 74% of the children found colors important for animated films. In the answers given by fourth graders, 88% of the students emphasized the effect of colors. Although it was seen that they generally liked productions with vivid colors, there was also a response that they liked plain colored animated series. The rate of fifth grade students' comments that colors are important in animated films is 69%. Sixth grade students' opinions that colors are effective are 59%. In this age group, vibrant colors were also preferred, and it was also found that overly bright colors were disturbing for some students. Instead of the importance of the colors in the animated series, there were also responses that found the subjects and their educational value important. This is an expected situation due to the period in which the age group is questioning ideas and responding critically. In this period, discussion and exchange of views become important. In the same research, the effectiveness of the drawing style of the characters on children's liking of animated series was found by 81%. While 90% of fourth grade children stated that they liked animated movies because of the colors, answers related to the quality of the line and fantastic characters were also found. While 78% of fifth graders found the drawing of the character important, there were also responses that found the content of the animated series or the appearance of the animated series character more important than the drawing of the character. Sixth graders found the drawing of the character important 69% of the time (Ö. Demir, 2013, pp. 223,224,225,226,227).

Based on the responses, it can be said that children pay attention to and care about the objects in animated series. As mentioned in the literature review, the fact that the character and the environment are unique and suitable for the target audience is an important factor to be considered and an essential aspect in the appreciation of the animated series. At the same time, a style suitable for the story should be created (Erdoğan et al., 2012, p. 116).

As a result of the answers obtained in the survey, children attach importance to music and dubbing in animated series and are aware of the importance of these elements. According to Demir's study, fourth grade students emphasized dynamic and entertaining music. As a result of the answers given by the fifth grade students, there were answers pointing out that music is effective in identifying with the hero and the role of music in helping the narrative. Sixth graders also mentioned other effects of music in accordance with their developmental level. Children stated that 70% of the music in animated movies was effective (Ö. Demir, 2013, pp. 234,235,236,237). As mentioned in the literature, designing the sound in harmony with the script and visual elements makes the animation effective (Selby, 2019, p. 106). According to Demir's research, it was seen that the design features in animation films; drawing technique, color, cinema and series features, characters and related features, costumes and accessories, music were effective in children's appreciation of the productions. Children's answers varied according to their cognitive development levels and it was thought that the phenomenon of struggle and critical approaches in the late childhood period was reflected in the answers. While fourth and fifth grade students' likes were related to mobility, liveliness, joy and struggle, sixth graders' thoughts were generally critical approach and justification of thoughts (Ö. Demir, 2013, p. 244).

In a research conducted by Aral et al., children aged 10 and 11 stated that the majority of them wanted television programs to be educational and entertaining (Aral et al., 2011, p. 492). It was observed that children in both age groups preferred to watch animated series while watching television. The programs that children watch on television change with increasing age. In a study conducted by Larson et al. in 1989 on "Changing Channels" in the pre-adolescence period, it was found that older children between the ages of 9-15 watched animated series and children's programs less (Larson et al., 1989, p. 595).

According to Demir's research, among the animated series options offered, animated series containing entertainment and comedy were liked by 60%, while those containing violence and struggle were liked by 40%. Tom and Jerry was the most popular cartoon with 21%, SpongeBob Square Shorts with 18% and Smurfs with 16%. The most popular hero was Jerry the Mouse with 18%. In general, funny and

entertaining characters are liked by 52%, while combative and violent characters are liked by 48%. It was stated that Jerry the Mouse was liked because of the sympathy for the weak. At the same time, the fact that he is a character in the style of sympathetic character drawing; his big eyes and smile may have been effective in his popularity. Besides being a lovable character, he is also a struggling and violent character (Ö. Demir, 2013, pp. 199,200).

In Şahin's 2017 study on character-based animated series reviews in the context of audience practices of primary school students, conducted with children between the first and fourth grades, the top 6 most watched animated series are, respectively: Winx Club, Gumball, Gravity Falls and Keloğlan, Phineas and Ferb, Sofia the First. The top 6 most loved animated series characters are: Keloğlan, Gumball, Hayri, Akin, Bloom and Princess Sofia (Şahin, 2017, p. 147). While the most common reason for liking the characters was that they had special powers, some other answers were that they were funny and entertaining, exhibited exemplary behaviors or characteristics and that the character was liked and admired (Şahin, 2017, p. 160). As a result of the question of the most disliked character, which is a question that children have difficulty in answering, the top 3 most disliked characters are Kara Vezir, Keloğlan, Pepe and Hayri (Şahin, 2017, p. 164). The first three most common answers to the question "If you were to make a animated series character, what kind of a animated series would it be?" are aesthetic features, funny-fun elements, exemplary behavior and characteristics (Şahin, 2017, p. 189).

In the study conducted by Cerrah Özsevgeç and Saka in 2018 on the animated series that children watch and the relationship between these preferences and their characters, it was seen that the animated series that primary school students like vary according to the levels and some of the most watched animated series are as follows: Rafadan Tayfa, Winx Club, Heidi, Gumball, Gravity Falls. In the study, it was found that there was a connection between the characteristics of the heroes that children liked and their own characters (Cerrah Özsevgeç & Saka, 2018, pp. 731 and 732). According to the information given in Demirkol's research in 2013, the top three most watched children's channels in Turkey are TRT Çocuk, Disney Channel and Cartoon Network (Demirkol, 2013, p. 24).

6. CONCLUSION

Within the scope of this research, it is aimed to determine the opinions of middle school students about animated series. This research is a quantitative research and survey method was used. The opinions, preferences and likes of middle school students about animation series were determined with the results of the survey. The relationship between these results and animation design processes was analyzed. Children have different likes and dislikes in different developmental periods. Examining the opinions of middle school students about animated series is important for both the literature and the animations to be made, therefore this research constitutes an infrastructure. These results are important in revealing the profiles of Turkish children attending middle school.

According to the results of the research, children have awareness and certain opinions on the subjects of scenario, character, color, sound design, which are animation design processes. It was determined that middle school students mostly watch 0-1 hour a day. They like adventure and science fiction animated series the most. They stated that they watch them to have fun and pass the time. Most of the respondents think that animated series should be both entertaining and instructive. Children gave the answer that animated series should only be entertaining at a rate close to this answer.

In parallel with their developmental stage and the development of abstract thinking, middle school students preferred complex, detailed animated series over animated series with simple themes. Although the majority of children stated that they disliked violence and slang, some children disagreed or were undecided. They liked human characters the most, followed by surreal characters. Children have certain views about character design. They stated that characters do not have to be perfect and can make mistakes. They stated that they do not have prejudices about liking good characters and disliking bad characters. It was found that children attach importance not only to physical characteristics but also to character traits and are curious about their lives. The majority of the children stated that they found accessories, clothes and backgrounds important. Children mostly found the colors and music used in animated series to be important.

In the research, some differences were found according to the classes. It was found that 5th graders, the youngest grade in the survey, agreed that the main characters in animated series should be flawless and invincible, differently from the older grades. Regarding the background and locations, it was observed that the 8th graders, the oldest age group, cared differently from the other grades. Based on these results, it can be said that the perception of perfect characters is lost with the growth of children's age and their awareness of background and space increases. Except for these statements, there were no differences between the grades in the questions.

In the research, some differences were found according to the genders. It was concluded that boys mostly disagreed with the statement about disliking the element of violence, while girls mostly agreed. It was observed that girls preferred surreal characters more than boys, while boys preferred object characters more than girls (girls preferred none). Girls agreed with the idea that characters should have their own unique accessories more than boys. In the statement of liking simple and understandable animated series, it was observed that boys responded more clearly both in agreement and disagreement by selecting the strongly option. The rate of boys who watch animated series every day is higher than the rate of girls who watch animated series every day. Again, the rate of boys who watch animated series 3-4 days a week is higher than the rate of girls who watch animated series 3-4 days a week. Other than these items, no gender differences were found in the survey.

The preferences of the students participating in this research about animated series and the design features of animations were observed in this manner. Children have opinions about design elements in animation and with the development of children's abstract thinking skills, middle school students' perspectives on characters, animation subjects and design elements of animation change and expanding.

This research has some limitations. The research did not differentiate between children's schools, thus a comparison can be made between children attending public or specific schools in future researchs. Conducting this research with more students, conducting it in different cities and conducting it with high school groups may be suggested topics for different studies. In addition to the survey format, measuring children's preferences by supporting the research with visuals or videos can be the subject of a different study.

REFERENCES

- Abalı, N. (2013a, April). Türkiye’de animasyonun dünü ve bugünü. *TASart Tasarım ve Sanat e-dergisi* [TASart Design and Art e-journal], (7), 6-14.
https://www.academia.edu/18796986/Tasart_Dergi_7_Say%C4%B1_AN%C4%B0MASYON_I_ANIMATION_I.
- Abalı, N. (2013b, September 6). *Çocuklara Yönelik Animasyon (Çizgi Film) Senaryosu: İçerik*. Animasyon Senaryosu Atölyesi.
<http://animasyonsenaryosu.blogspot.com/2013/09/cocuklara-yonelik-animasyon-senaryosu.html>
- Abalı, N. (2013c, September 10). *Çocuklara Yönelik Animasyon (Çizgi Film) Senaryosu: Teknik*. Animasyon Senaryosu Atölyesi.
http://animasyonsenaryosu.blogspot.com/2013/09/cocuklara-yonelik-animasyon-senaryosu_10.html
- Adak Özdemir, A., & Ramazan, O. (2013). Çizgi Filmlerin Çocukların Davranışları Üzerindeki Etkisinin Anne Görüşlerine Göre İncelenmesi [Views Of Mothers About Cartoons’ Impact On Children’ Behaviour]. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 35(35), 157-173.
- Aksoy, T. K. (2002). *Çizgi Filmde Sahne Tasarımı* [Layout Desing in Animation]. Doktora tezi, Anadolu Üniversitesi, Eskişehir.
- Aral, N., Ceylan, R., & Bıçakçı, M. Y. (2011). Çocukların Televizyon Seyretme Alışkanlıklarının Yaş ve Cinsiyete Göre İncelenmesi [Study Of Television Viewing Habits Of Children By Age and Gender]. *Kastamonu Eğitim Dergisi*, 19(2), 489-498.
- Arslan, H. (2013). *Çocuklar İçin Medya Dünyasında Yayınlanabilecek Bir Karakter Oluştururken Dikkat Edilmesi Gereken Biçim Ve İçerik Özellikleri Ve Bir Uygulama Örneği* [It Is An Application Sample and It Needs Significant Features Of Content and Style While You Create A Character To Be Able To Publish On The Media]. Yüksek lisans tezi, Arel Üniversitesi, İstanbul.
- Atabek Yılmaz, A. (2019). *Türkiye’de Üretilen 3b Animasyonların Ve Sektör Sorunlarının Animasyon Sektörü Çalışanları Tarafından Değerlendirilmesi* [Evaluation Of Generated Animation 3d Animation and Industry Problems In

- Turkey By Sector Employees]. Doktora tezi, İstanbul Kültür Üniversitesi, İstanbul.
- BALCI, A. (1989). Eğitimsel araştırmanın eğitimsel sorunların çözümünde uygulaması [The application of educational research to solving educational problems]. *Ankara University Journal of Faculty of Educational Sciences (JFES)*, 22(1), 411-420.
- Başarır, Ç. (2022). *Stop Motion Canlandırmada 3 Boyutlu Baskı Teknolojisi İle Karakter Tasarımı* [Character Design With 3d Printing Technology In Stop Motion Animation]. Yüksek lisans tezi, Hacettepe Üniversitesi, Ankara.
- Bedekar, M., Joshi, P. (2020). Cartoon Films And Its Impact On Children's Mentality. *Research Review Journals*, 5(6), 13-18.
- Bopche, P. K. (2015). *Animation: A Learning Tool*. Doctoral dissertation, National Institute of Technology, Rourkela.
- Bursa Eskişehir Bilecik Kalkınma Ajansı, (2018). *Animasyon sektörü raporu*. Retrieved from: <https://bebka.org.tr/wp-content/uploads/2021/07/Animasyon-Sektoru-CC-0-0-Raporu-2018.pdf>
- Büyükbaykal, G. (2007). Televizyonun Çocuklar Üzerindeki Etkileri [The Effects of Television on Children]. *İletişim Fakültesi Dergisi*, (28), 31-44.
- Cavalier, S. (2011). *The World History Of Animation*. Berkeley: University of California Press.
- Cengiz, Ö., Küsmüş, G. İ., & Ramazan, O. (2020). TRT Çocuk Kanalında Yayınlanan Çizgi Filmlerin Gelişim Alanlarına Göre Değerlendirilmesi [Evaluation of Cartoons Broadcasted in TRT Children's Channel According to Development Areas]. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 16(2), 271-287.
- Cerrah Özsevgeç, L., Saka, A. (2016). Çocukların İzledikleri Çizgi Filmler ve Bu Tercihlerinin Karakterleri İle İlişkisi. *Uluslararası Bilimsel Araştırmalar Dergisi (IBAD)* [The Cartoons Which Children Watch and The Relationship Between Their Characters and These Preferences], 3(2), 725-734.
- Cesur, S., & Paker, O. (2007). Televizyon ve çocuk: Çocukların TV programlarına ilişkin tercihleri [Television and Children: Children's Preferences of TV Programs and Genres]. *Elektronik Sosyal Bilimler Dergisi*, 6(19), 106-125.
- Çakın, A. Ç. (2012). *3B Animasyon Filmlerin Yapım Sürecinin İncelenmesi ve Bir Animasyon Denemesi* [A Study of 3D Animation Films Production Pipeline: An Animation Piece]. Yüksek lisans tezi, Hacettepe Üniversitesi, Ankara.

- Çakmak, S., & Karoğlu, A. (2020). Dijital Sanat Bağlamında Animasyon Film Karakter Tasarımları Üzerine Bir İnceleme [A Study on Animation Film Character Design in Digital Art]. *İdil Sanat ve Dil Dergisi*, 9(67), 515–527.
- Çolak, H. İ. (2019). *Türkiye’de Çizgi Film Sektöründe Kullanılan 3 Boyutlu Animasyon Yazılımlarının Karakter Animasyonu Üzerine Değerlendirilmesi* [The 3-Dimensional Animation Of The Character Animation Evaluation On Software Sector In Turkey In Cartoon]. Yüksek lisans tezi, Kütahya Dumlupınar Üniversitesi, Kütahya.
- Demir, Ö. (2013). *Türk Televizyonlarında Yayınlanan Çizgi Filmlerin İlköğretim Çağı Çocuklarının Toplumsallaşma Sürecine Etkilerinin Değerlendirilmesi* [The Evaluation Of The Effects Of Animated Cartoons Telecasted On Turkish Televisions To Primary School Students' Socialization Process]. Doktora tezi, Gazi Üniversitesi, Ankara.
- Demir, Ö. (2019). *Filmin Çizgisi: Çizgi Film Ve Çocukların Beğenisi (The Line of the Movie: Cartoons and Children's Likes)*. Ankara: Pegem Akademi
- Demir, R. (2019). *Türkiye’de Çocuk Kanallarında Yayınlanan Çizgi Filmlerde Dini Ve Kültürel Değer Eğitimi* [The religious and cultural values education in the cartoon series broadcasted on cartoon channels in Turkey]. Doktora tezi, Sakarya Üniversitesi, Sakarya.
- Demirkol, P. (2013). *Televizyon Çocuk Programlarında Yer Alan Müziklerin Müzik Dersi Öğretim Programı Genel ve Özel Amaçları Açısından İncelenmesi* [Analyzing The Relation Between Music In Children Tv Program and The General and Specific Aims Of Music Education Program]. Yüksek Lisans Tezi, İnönü Üniversitesi, Malatya.
- Doğan, Y. (2007). İlköğretim Çağındaki 10-14 Yaş Grubu Öğrencilerinin Gelişim Özellikleri [The Developmental Characteristics Of 10 To 14 Years Old Elementary School Students]. *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 8(13), 155-187.
- Erdoğan, E., Cigal, D., Abalı, N. (2012). Üç Boyutlu Bilgisayar Animasyonun Yapım Aşamaları. *Bilişim Dergisi*. (147), 116.
- https://www.academia.edu/2093855/%C3%9C%C3%A7_Boyutlu_Bilgisayar_Animasyonunun_Yap%C4%B1m_A%C5%9Famalar%C4%B1

- Erdoğan, G. (2020). *Karakter Tasarımında Umulmadık Bir İlham Kaynağı: Diatomeler* [An unexpected inspiration point in character design: Diatoms]. Yüksek lisans tezi, Kütahya Dumlupınar Üniversitesi, Kütahya.
- Erkan, E. (2021). *Üç Boyutlu Animasyonun Kullanım Alanları ve Bir Tıbbi Animasyon Uygulaması* [Useing Areas Of 3 Dimensional Animation and A Medical Animation Application]. Yüksek lisans tezi, Hacettepe Üniversitesi, Ankara.
- Furniss, M. (2013). Animasyon'un kutsal kitabı: Flipbooks'dan Flash'a Animasyon Hakkında Her Şey [The Animation Bible: A Guide to Everything - from Flipbooks to Flash] (S. Çelenk, N. Cihanşümül Maral, Trans.). İzmir: Karakalem Kitabevi Yayınları. (Original work published 2008).
- Gossman, R. (2011). *The Animation Production Process*. Retrieved September, 2022, from: <http://www.studio-goss.com/images/ani-prod-process.pdf>
- Gökçearslan, A. (2010). Canlandırma Sinemasında Karakter Tasarımı ve Amerika Kökenli Önemli Canlandırma Karakterlerinin Analizi [Character Design In Animation Cinema and Analysis Of Important Animation Character America Of Origin]. *E-Journal of New World Sciences Academy*, 5(4), 347-364.
- Göktepe, E. (2015). *Geçmişten Günümüze Hareketli Görüntü ve Türkiye'de Animasyonun Gelişimi* [Development Of The Animation In Turkey and Moving Image From Past To Present]. Yüksek lisans tezi, İstanbul Ticaret Üniversitesi, İstanbul.
- Güler, D. (1989). Çocuk, Televizyon ve Çizgi Film [Child, Television and Cartoons]. *Kurgu*, 5(1), 144-158.
- Güler, D. (1989). Çocuk, televizyon ve çizgi film. *Kurgu*, 5(1), 144-158.
- Güney, Ç. (2019). *Çizgi Filmlerde Değer Yüklü Mesajlarda İçerik Analizi: Şeker Hoca ve Yusuf'un Dünyası Örneği* [Content analysis of value messages in cartoons: The example of Şeker Hoca and Yusuf's World]. Yüksek lisans tezi, Hitit Üniversitesi, Çorum.
- Gürsaç, Y. (1999). *Bilgisayarda Üç Boyutlu Animasyon Film Üretimi ("Bir Başına Oyun") Film Uygulaması* [Three Dimension Animation Film Production On Computer (An Application Of Animation Film Called 'Solitary Game')]. Sanatta yeterlilik tezi, Anadolu Üniversitesi, Eskişehir.
- Habib, K., & Soliman, T. (2015). Cartoons' Effect In Changing Children Mental Response and Behavior. *Open Journal of Social Sciences*, 3(09), 248.

- Huang, F., & Lee, M. J. (2009). Does television viewing affect children's behaviour?. *Pacific Economic Review*, 14(4), 474-501.
- İmİK, Ü. (2011). *Çizgi Film Müziklerinin Yapısal Olarak İncelenmesi ve Değerlendirilmesi* [Structural Analysis and Assessment Of The Cartoon Musics]. Doktora tezi, İnönü Üniversitesi, Malatya.
- İnce, M. (1991). *Çizgi filmlerin 6-18 yaş grubu bireylerin yaşantılarında yeri ve önemi* [The Place and Importance Of Cartoons In The Lives Of Individuals Aged 6-18]. Yüksek Lisans Tezi, Gazi Üniversitesi, Ankara.
- Kaba, Fethi. (2020). *Hareketlendirme ve Zamanlama Sanatı: Animasyon* [Animation Art and Timing: Animation]. Eskişehir: Nisan Kitabevi.
- Kaplan, C. (2021). *Okul Öncesi Çocuklara Yönelik Eğitsel Animasyon Filmlerin İncelenmesi: Güneş Sistemi Konulu İki Boyutlu Animasyon Uygulaması* [Investigation Of Educational Animation Films For Preschool Children: 2d Animation Application On Solar System]. Yüksek lisans tezi, Hacettepe Üniversitesi, Ankara.
- Karaca, S. S. (2019). *Çizgi Filmlerde Değerler Eğitimi, Değerler Eğitimi Açısından Rafadan Tayfa Çizgi Filminin İncelenmesi* [Ethical values in animated cartoonsteaching ethical values using the example of the Animation Rafadan Tayfa]. Yüksek lisans tezi, İzmir Kâtip Çelebi Üniversitesi, İzmir.
- Karavaşinoğlu, Ş. (2021). Karakter Tasarım Yaklaşımları [Formal Approaches in Character Design]. *Akademik Sanat*, (13), 24-35.
- Kaymak, N. (2020). *Yerli ve Yabancı Çizgi Filmlerin Evrensel Değerler Bakımından İncelenmesi* [Investigation Of Domestic and Foreign Cartoons In Terms Universal Values]. Yüksek lisans tezi, Gazi Üniversitesi, Ankara.
- Koç Başaran, Y. (2017). Sosyal Bilimlerde Örneklem Kuramı [Sampling Theory In Social Sciences]. *the Journal of Academic Social Sciences*, (47), 480-495.
- Koç, H. (2019). *Ortaokul 5. Sınıf Öğrencilerinin Televizyon İzleme Alışkanlıklarının İncelenmesi* [Investigation Of Television Viewing Habits Of Middle School 5th Grade Students]. Yüksek lisans tezi, Erzincan Üniversitesi, Erzincan.
- Koç, M. (2004). Gelişim Psikolojisi Açısından Ergenlik Dönemi ve Genel Özellikleri [Adolescence Period and It's General Characteristics in Terms of Developmental Psychology]. *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 1(17), 231-238.

- Küçük, T. (2022). *Ulusal/Uluslararası Yapılan Araştırmalarda, Eğitimde Animasyon Kullanımının İncelenmesi ve Bir Animasyon Uygulaması Örneği* [An Examination Of The Usage Of Animation In Education In National/International Studies and An Animation Application Example]. Yüksek lisans tezi, İstanbul Aydın Üniversitesi, İstanbul.
- Larson, R., Kubey, R. & Colletti, J. (1989). Changing Channels: Early Adolescent Media Choices and Shifting Investments In Family and Friends. *Journal of Youth and Adolescence*, 18(6), 583-599.
- Malatyaloğlu, Ö. (2014). *Belirli Yaş Gruplarına Göre Çizgi Filmlerde Karakter Soyutlama Düzeyi* [The Level Of Character Abstraction In Animated Cartoons According To Certain Age Groups]. Yüksek lisans tezi, Haliç Üniversitesi, İstanbul.
- Moreno, L. (2014, October 30). *The Creation Process Of 2D Animated Movies*. Retrieved October, 2022, from: https://adas.az/uploads/catalog/Files/2014-2015-02-4-TR_baixa-min.pdf
- Mou, T. Y. (2015). Creative Story Design Method In Animation Production Pipeline. *Proceedings of The Third International Conference on Design Creativity, Indian Institute of Science, Bangalore*.
- Muslu, D. (2015). *Okul Öncesi ve İlkokul Çağı Çocuklarının Animasyon Tekniklerine Yönelik Algıların Değerlendirilmesi* [An Assessment Of Pre-school and Primary School Children's Perceptiveness To Visual Animation Techniques]. Yüksek lisans tezi, Selçuk Üniversitesi, Konya.
- Namlı Altıntaş, İ. (2016). 9-11 Yaş Arası Öğrencilerin Çizgi Film ve Animasyonlardan Edindikleri Değerler ve Rol Model Alma Durumları [Values That Children Aged Between 9-11 Acquire From Cartoons and Animation And Their Modeling Behaviors]. *Route Educational and Social Science Journal*, 3(2), 316-335.
- Odabaşı, Y. (1999). *Anket yöntemi*. Retrieved November, 2023, from: https://scholar.google.com/scholar?hl=tr&as_sdt=0%2C5&q=Odaba%C5%9F%C4%B1%2C+Y.+%281999%29,+Anket+y%C3%B6ntemi.+Sosyal+Bilimlerde+Ara%C5%9F%C4%B1rma+Y%C3%B6ntemleri+i%C3%A7inde+ed.+Ali+At%C4%B1f+Bir.+Eski%C5%9Fehir%3A+TC+Anadolu+%C3%9Cniversitesi+Yay%C4%B1mlar%C4%B1%2C+1081.&btnG=

- Oğur, R., & Tekbaş, Ö. F. (2003). Anket nasıl hazırlanır [How to prepare a survey]. *Sted*, 12(9), 336-340.
- Oral Paksoy, S.A., Arslan, E. (2021). Okul Öncesi Dönem Çocuklarının Televizyon İzleme ve Bilgisayar Oynama Sürelerinin Görsel-Motor Entegrasyonu Açısından İncelenmesi [Examining the Television Viewing and Computer Playing Times of Preschool Children in Terms of Visual-Motor Integration]. *Muğla Sıtkı Koçman Üniversitesi Eğitim Fakültesi Dergisi*, 8(2), 379-390.
- Özdemir, O., Özdemir, P. G., Kadak, M. T., & Nasıroğlu, S. (2012). Kişilik Gelişimi. *Psikiyatride güncel yaklaşımlar* [Personality Development], 4(4), 566-589.
- Özden, Z., & Ülgen, Ç. (2015). Canlandırma Filmi Yapım Sürecinde Karakter Tasarım Aşaması. *Yedi: Sanat, Tasarım ve Bilim Dergisi* [Character Design in Animated Film Production], (14), 23-38.
- Öztürk, C., & Karayağız, G. (2007). Çocuk ve televizyon [Child and Television], *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*, 10(2), 81-85.
- Pikkov, Ü. (2010). *Animasophy: Theoretical writings on the animated film*. Tallinn: Estonian Academy of Arts.
- Radyo ve Televizyon Üst Kurulu. (2006). *İlköğretim çağındaki çocukların televizyon izleme alışkanlıkları kamuoyu araştırması*. Retrieved from: <https://www.rtuk.gov.tr/Media/FM/Birimler/Kamuoyu/ilkogretim-cagindaki-cocuklarin-televizyon-izleme-aliskanliklari-arastirmasi0053-2.pdf>
- Radyo ve Televizyon Üst Kurulu. (2013). *Türkiye’de çocukların medya kullanma alışkanlıkları araştırması*. Retrieved from: https://www.rtuk.gov.tr/Media/FM/Birimler/Kamuoyu/2013%20Y%C4%B1%C4%B1%20Ara%C5%9Ft%C4%B1rmalar%C4%B1_0110.pdf
- Radyo ve Televizyon Üst Kurulu. (2018). *Çocukların yeni medya kullanım alışkanlıkları ve siber zorbalık araştırması*. Retrieved from: <https://www.rtuk.gov.tr/Media/FM/Birimler/Kamuoyu/cocuklarin-yeni-medya-kullanimlari-ve-siber-zorbalik.pdf>
- Radyo ve Televizyon Üst Kurulu. (2018). *Televizyon izleme eğilimleri araştırması*. Retrieved from: <https://www.rtuk.gov.tr/Media/FM/Birimler/Kamuoyu/televizyonizlemeegilimleriarastirmasi2018.pdf>

- Scott, J. (2003). *How To Write For Animation*. New York: The Overlook Press, Peter Mayer Publishers, Inc.
- Selby, A. (2013). *Animation*. London: Laurence King Publishing.
- Sevindi, K. (2022). *Animasyon Sineması Tarih, Kuram ve Uygulama* [Animation Cinema History, Theory and Practice]. İstanbul: Urzeni Yayınevi
- Siyamoğlu, Z. (2019). *Üç Boyutlu Eğitsel Sanal Ortamlarda Karakter Tasarımına Yönelik Öğrenci Tercihlerinin Belirlenmesi* [Determining Student Preferences For Character Design In Three Dimensional Educational Virtual Environments]. Yüksek lisans tezi, Trabzon Üniversitesi, Trabzon.
- Süalp, Ö. (2019). *Görsel Hikaye Anlatımında Karakter Tasarımının Anlatısal Boyutu* [The Narrative Of Character Design In Visual Storytelling]. Yüksek lisans tezi, İstanbul Üniversitesi, İstanbul.
- Şahin, S. (2017). *İlkokul Öğrencilerinin İzleyici Pratikleri Bağlamında Karakter Eksenli Çizgi Film İncelemeleri*. Yüksek lisans tezi, Erciyes Üniversitesi, Kayseri.
- Şen, M. (2020). *Temel Eğitimde Değerler Eğitimi Kapsamında Türk ve Yabancı Animasyon Filmlerinin İncelenmesi* [Analysis Of Turkish and Foreign Production Animation Films Within The Scope Of Values Education In Basic Education]. Yüksek Lisans Tezi, Bolu Abant İzzet Baysal Üniversitesi, Bolu.
- Şenler, F. (2005). Animasyon Tarihi, Teknikleri ve Türkiye'deki Yansımaları [Animation History, Techniques and Reflections in Turkey]. *Hacettepe Üniversitesi Türkiyat Araştırmaları (HÜTAD)*, (3), 99-114.
- Şirin, M.R. (2012, May). *Çocuk ve İlk Gençlik Edebiyatı Ders Notları*. Retrieved September, 2022, from: https://cocukvakfi.org.tr/wp-content/dosya/ders_notlari/1.1.pdf#page=52
- Televizyon İzleme Araştırmaları Anonim Şirketi. (2021). *Televizyon izleme ölçümü 2020 yılı*. Retrieved from: <https://tiak.com.tr/>
- Temizyürek, F., & Acar, Ü. (2014). Çizgi Filmlerdeki Subliminal Mesajların Çocuklar Üzerindeki Etkisi. *Cumhuriyet Uluslararası Eğitim Dergisi* [The Effect of Subliminal Messages in Cartoons on Children], 3(3), 25-39.
- Tuğlacı, P. (1971). Canlandırma (animasyon). *Okyanus Türkçe Sözlük*. İstanbul: Pars Yayınları.
- Türk Dil Kurumu. (n.d). Canlandırma. In *Türk Dil Kurumu Çevrimiçi Sözlük*. Retrieved September 26, 2022, from <https://sozluk.gov.tr/>

- Türk Dil Kurumu. (n.d). Çizgi Film. In Türk Dili Kurumu Çevrimiçi Sözlük.
Retrieved September 26, 2022, from <https://sozluk.gov.tr/>
- Türk Dil Kurumu. (n.d). Karakter. In Türk Dili Kurumu Çevrimiçi Sözlük. Retrieved April 5, 2022, from <https://sozluk.gov.tr/>
- Türk Dil Kurumu. (n.d). Konu. In Türk Dili Kurumu Çevrimiçi Sözlük. Retrieved September 9, 2022, from <https://sozluk.gov.tr/>
- Türker, İ. H. (2011). Canlandırma'nın Tarihçesi ve Türk Canlandırma Sanatı. *İnönü Üniversitesi Sanat Ve Tasarım Dergisi* [Considerations On Animation (Cartoon) and Turkish Animation Art], 1(2), 227-241.
- Uçkan, M. M. (2004). *Animation Production and An Ideal Animation Studio Design*. Yüksek lisans tezi, Yeditepe Üniversitesi, İstanbul.
- Ulutaş, M. (2021). *Çizgi Karakter Tasarımı Eğitimi Bağlamında "Antropomorfizm"* ["Anthropomorphism" in the Context of Cartoon Character Design Education]. Yüksek lisans tezi, Dicle Üniversitesi, Diyarbakır.
- Ülgen, Ç. (2019). *Canlandırma Filmciliğinde Kültür ve Karakter Tasarımı Etkileşimi: Anadolu Giyim ve Aksesuar Tasarımları Çerçevesinde Işık Adası Projesi* [Interaction Of Culture And Character Design In Animation Filmmaking: Işık Island Project Within The Framework Of Anatolian Clothing And Accessory Designs]. Sanatta yeterlilik tezi, Dokuz Eylül Üniversitesi, İzmir.
- Ürtekin, Ö. (2018). *Geçmişten Günümüze Animasyon Filmlerinde Mekân Kullanım Analizi* [The Analysis On Use Of Place In Animation Films From The Past To The Present]. Yüksek lisans tezi, Işık Üniversitesi, İstanbul.
- Üzer, M. (2019). *Küçük Hezarfen Çizgi Filminde Yer Alan Milli Kültür, Milli Değer, Milli Kimlik Unsurlarının İncelenmesi* [The Examination Of National Culture, National Value, National Identity Elements In Küçük Hezarfen Cartoon]. Yüksek lisans tezi, Gazi Üniversitesi, Ankara.
- Yalçın, S., Tuğrul, B., Naçar, N., Tuncer, M., Yurdakök, K. (2003). Factors That Affect Television Viewing Time in Preschool and Primary School Children. *Pediatrics International*, 44(6), 622-627.
- Yaşar Ekici, F. (2015). Çizgi filmlerin çocuklar üzerindeki etkilerine ilişkin çok boyutlu bir değerlendirme [Assessment Of The Effects Of Cartoons On Children In The Context Of Child Development, Violence and Aggression, Consumption Habits and Cultural Transfer], *Türk ve İslam Dünyası Sosyal Araştırmalar Dergisi*, 2(5), 70-84.

- Yavuzer, H. (1990). *Çocuk Psikolojisi* [Child Psychology]. İstanbul: Remzi Kitabevi.
- Yeten, G. (2022). Çocuklara Türk Kültürünün Aktarılmasında Çizgi Filmlerin Yeri ve Önemi [The Place and Importance of Cartoon Films in Transferring Turkish Culture to Children], *Osmaniye Korkut Ata Üniversitesi Fen Edebiyat Fakültesi Dergisi*, 4(2), 71-79.
- Zengineken, E. (2020). *Animasyonda Görsel Dil ve Tutarlılık Oluşturmak: “Kapı” Animasyon Filmi* [Creation Of Visual Language and Consistency In Animation: 'Kapı' Animation Film]. Sanatta yeterlilik tezi, Maltepe Üniversitesi, İstanbul.



APPENDIX A: ETHIC COMMITTEE REPORT



T.C.
YEDİTEPE ÜNİVERSİTESİ REKTÖRLÜĞÜ

15.05.2023

Sayı : E.50532705-302.14.01-1552
Konu : Aysel Yardımcı Kurul Onayı

İLGİLİ MAKAMA

Üniversitemiz Sosyal Bilimler Enstitüsü Animasyon Tasarımı Yüksek Lisans Öğrencisi Aysel Yardımcı'nın, Prof. Dr. Neda Üçer danışmanlığında gerçekleştireceği "Ortaokul Öğrencilerinin Çizgi Filmler Hakkında Tercihleri ile Çizgi Filmlerin Tasarımsal Süreçleri Arasındaki İlişki" başlıklı araştırmasının Beşeri Bilimler etik standartlarına uygunluğuna ilişkin Yeditepe Üniversitesi Beşeri ve Sosyal Araştırmalar Etik Kurulu Onayı ekte sunulmuştur.

Gerekli iznin verilmesi hususunu bilgilerinize arz ve rica ederim.

Prof. Dr. Fatma Yeşim EKİNCİ
Rektör a.
Rektör Yardımcısı

Ek: Etik Kurul Onayı.pdf

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Belge Doğrulama Adresi : <http://belgedogrulama.yeditepe.edu.tr/bg.aspx?id=54CB7BSD-DA87-47D8-A17D-7965C13B0B5A>
Yeditepe Üniversitesi 26 Ağustos Yerleşimi, İnönü Mahallesi Kayışdağı
Caddesi 34755
Ataşehir / İSTANBUL
Telefon No: (0216) 578 00 00 Faks No : (0216) 578 02 99
İnternet Adresi www.yeditepe.edu.tr
Kep Adresi : yeditepeuniversitesi@hs03.kep.tr

Bilgi İçin:

Unvan:

Telefon No:



APPENDIX B: QUESTIONS OF THE SURVEY

Ortaokul Öğrencilerinin Çizgi Filmler Hakkındaki Beğeni ve Düşünceleri Anketi -
Survey on Secondary School Students' Likes and Opinions about Animated Series
(Turkish (orijinal) and English Translation)

1. Ad- Soyad (Name- Surname):

2. Cinsiyet (Gender):

☐ Kız(Girl) ☐ Erkek(Boy)

3. Yaş (Age):

4. Sınıf (Grade):

☐ 5. sınıf (5. grade)

☐ 6. sınıf (6. grade)

☐ 7. sınıf (7. grade)

☐ 8. sınıf (8. grade)

5. Hangi ilçede yaşıyorsun (Which district you live in)?:

6. Haftada ortalama kaç gün çizgi film izliyorsun (On average, how many days a week do you watch television animated series)?

☐ Her gün (Everyday)

☐ Haftada 5-6 gün (5-6 days in a week)

☐ Haftada 3-4 gün (3-4 days in a week)

☐ Haftada 1-2 gün (1-2 days in a week)

☐ Haftada 1-2 günden daha az (Less than 1-2 days in a week)

7. Günde ortalama kaç saat çizgi film izliyorsun (On average, how many hours do you watch television animated series in a day)?

☐ 0-1 saat (0-1 hour)

☐2-3 saat (2-3 hours)

☐4-5 saat (4-5 hours)

☐6 saatten daha fazla (More than 6 hours)

8. Çizgi filmleri en çok hangi araçla izliyorsun (In which medium do you watch tv animated series the most)?

☐Televizyon (Television)

☐Sinema (Cinema)

☐Tablet (Tablet)

☐Telefon (Mobile phone)

9. Televizyonda en çok sevdiğin çizgi filmin adı nedir (What is your favorite animated series in television)?:

10. İzlediğin çizgi filmlerin sürelerini yeterli buluyor musun (Do you find the duration of the tv animated series you watch sufficient)?

☐Evet (Yes)

☐Hayır (No)

11. En çok hangi konulu çizgi filmleri seversin (Which themed tv animated series do you like the most)?

☐Efsane (Legendary)

☐Macera (Adventure)

☐Bilim-kurgu (Science Fiction)

☐Eğitici (Educational)

☐Komedi (Comedy)

☐Duygusal (Emotional)

☐Fantastik (Fantastic)

12. En çok hangi sebeple çizgi film izlemeyi tercih ediyorsun (For what reason do you prefer to watch tv animated series the most)?

☐Eğlenmek için (For fun)

☐Öğrenmek için (To learn something)

☐Konusunu beğendiğim için (Because i like the subject matter)

☐Merak ettiğim için (Just out of curiosity)

☐Zaman geçirmek için (To pass the time)

13. Sence bir çizgi film içerik olarak nasıl olmalıdır (How do you think a animated series should be in terms of content)?

☐Eğlendirici (Entertaining)

☐Öğretici (Didactic/Teaching)

☐Hem eğlendiren hem öğreten (Both entertaining and teaching)

Likert ölçekli sorular (Likert scale questions):

14. Çizgi filmlerde merak ve heyecan olduğu zaman daha çok severim (I like animated series more when there is curiosity and excitement).

15. Çizgi filmlerde olayların önce karmaşıklaşıp sonra çözüme kavuşması benim merak etmemi sağlar ve beni heyecanlandırır (When things get complicated and then resolved in animated series, it makes me wonder and excites me).

16. Çizgi filmlerin sonunda sorunun çözülmüş olması beni sevindirir (I will be happy if the problem is solved at the end of the animated series).

17. Basit ve anlaşılır çizgi filmleri severim (I like simple and understandable animated series).

18. Karmaşık, detaylı ve gizemli çizgi filmleri severim (I like complex, detailed and mysterious animated series).

19. Çizgi filmler olumlu mesajlar içermelidir (Animated series should contain positive messages).

20. Çizgi filmlerdeki argo sözcüklerden hoşlanmam (I don't like slang in animated series).

21. Çizgi filmlerde gösterilen şiddet unsurlarından hoşlanmam (I do not like violence in animated series).

22. En sevdiğin çizgi film karakterinin adı nedir (Who is your favorite animated series character)?:

23. Çizgi filmlerde hangi karakter türlerini izlemekten hoşlanırsın (Which types of characters do you like to watch in animated series)?

☐ İnsan karakterler (Human characters)

☐ Hayvan karakterler (Animal characters)

☐ Gerçeküstü karakterler (Surreal characters)

☐ Nesne karakterler (araba gibi) [Object characters (like cars)]

Likert ölçekli sorular (Likert scale questions):

24. Çizgi filmlerdeki karakterle empati yaparım (I empathize with the characters in animated series).

25. Çizgi filmlerde kendime benzettiğim karakterleri daha çok severim (I like the characters in animated series more if they are similar to me).

26. Çizgi filmlerdeki ana karakter kusursuz ve yenilmez olmalıdır (The main character in animated series should be perfect and invincible).

27. Çizgi filmlerdeki iyi karakterleri severim (I like good characters in animated series).

28. Çizgi filmlerdeki kötü karakterleri sevmem (I don't like bad characters in animated series).

29. Çizgi filmlerdeki karakterler güzel görünmeli ve havalı olmalıdır (Characters in animated series should look good and be cool).

30. Çizgi filmlerdeki karakterler sıradan olabilirler (Characters in animated series can be ordinary).

31. Kusurları olan veya hata yapabilen karakterleri severim (I like characters that have flaws or can make mistakes).

32. Benim için en önemli şey karakterin nasıl görüldüğü yani fiziksel özellikleridir (The most important thing for me is how the character looks, i.e. physical characteristics).

33. Benim için en önemli şey karakterin kişisel özellikleridir (The most important thing for me is the character's personal characteristics).

34. Çizgi filmlerdeki karakterleri iyice tanımak isterim (Nelerden hoşlanır, neler yaşamıştır vb.) [I like to get to know the characters in animated series (what they like, what they have been through, etc.)].

35. Benim için karakterlerin kıyafetleri önemlidir (The clothes of the characters are important to me).

36. Karakterlerin kendilerine özgü aksesuarları (şapka, maske, pelerin vb.) olmalıdır (Characters should have their own accessories (hats, masks, capes, etc.).

Likert ölçekli sorular (Likert scale questions):

37. Çizgi filmlerde renk kullanımı önemlidir (The use of color in animated series is important).

38. Çizgi filmlerde kullanılan renkler bazı duyguları veya durumları hatırlatabilir (Beyaz rengi iyilik, siyah rengi kötülük, kırmızı rengi heyecan duygusu gibi...) [The colors used in animated series can remind some emotions or situations (White color is goodness, black color is evil, red color is excitement...)].

39. Çizgi filmlerde arka plan ve mekânlar benim için önemlidir (Backgrounds and locations in animated series are important to me).

40. Çizgi filmlerde kullanılan objeler dikkatimi çeker (Objects used in animated series attract my attention).

41. Çizgi filmlerdeki seslendirmeler benim için önemlidir (Bebek karakterin sesinin bebeksi olması, yaşlı karakterin yaşlı gibi konuşması vb.) [The voices in animated series are important to me (a baby character sounds babyish, an old character sounds old, etc.)].

42. Müzik çizgi filmleri daha etkileyici hale getirir (Music makes animated series more impressive).

43. Bazı çizgi film müziklerini severim ve eşlik ederim (I like and sing along to some animated series music).

