A General Look on the Impact of Turkish Horror Movies: An Exploratory Study on the Opinions of Youth on Horror Movies

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Abstract
This study aims to examine young Turkish university students’ perceptions on horror movies and the impact of this genre on them. Also, this study aims to gain an understanding of the role of makeup and special effect makeup in horror movies for this particular audience. An exploratory survey was conducted with 1,000 randomly selected participants 18 years and older who were students studying at five universities in the Turkish Republic of Northern Cyprus. Findings suggest that 70.4% of the respondents prefer watching supernatural horror films where the djinn was reported to be the most feared religious horror character; 86.4% of women and 65.8% of men reported supernatural events as scary. With regard to the importance of makeup in horror movies, 67.1% females and 53.9% males reported that makeup in horror movies was very important, where 26.9% preferred blood as a special effect, 51.1% reported that hand-based makeup was more acceptable, and 65.4% indicated that PC-supported makeup would never replace hand-based makeup. These findings suggest that although there is a potential inclination to watch the horror movie genre, which is a very new genre in Turkish cinema as well as the makeup and special effects used in horror movies, specifically djinn makeup appears to be of importance for the young Turkish film audiences.

Keywords
horror films, Turkish horrors movies, special effect makeup, djinn image, youth attitudes

Introduction
The concept of “genre” in cinema was born within the industry as a result of the contributions from critics, viewers, and cinema writers and currently maintains its ground. However, there is no clear consensus on exactly how these genres are defined or how they were created.

According to Abisel (1995), throughout cinema history, although horror movies have been the longest existing movie genre, they also have managed to maintain the title of “most watched.” Despite losing popularity from time to time, horror movies continue not to be affected from sectoral financial crises; horror movies can be produced with low budgets. In addition, another reason why horror movies are still standing is because they are one of the most preferred genres worldwide.

This study aims to focus on the opinions on Turkish horror movies of young Turkish university students studying in the Turkish Republic of Northern Cyprus (TRNC) who were registered in an associates, a bachelors, masters, and doctoral degree programs during the 2018–2019 academic year at five universities in the island.

Historical Development of Horror Movies
The first horror movie, La Manoir Du Diable, is an 1896 2-min-long production by Georges Melis. In addition to its being the first horror movie, the film brings together the concepts of vampire and devil and sets the foundation for future horror movies entailing symbolisms of vampire, devil, and sorcerer (Akbulut, 2012; Odell & Le Blanc, 2011). According to Scognamillo (1996), in addition to gothic middle age monasteries and cemeteries, bat formed vampires or demonic creatures taking human form from hell are among the first examples of horror movie motifs.

Horror movies were initially seen with the development of German expressionism and World War I (Odell & Le...
Blanc, 2011). According to Elsaesser (2003) and Dabağyan (2004), these two developments not only shaped cinema in general but also provided a sense of direction for horror movies. Movies of this era, which were associated with German expressionism, like The Student from Prague (1913), Dr. Caligari’s Office (1919), Golem (1920), Nosferatu (1922), Dr. Mabuse (1922), and Metropolis (1926) used surreal decor, actions, and shadowed lighting extensively and knowingly while maintaining precise story lines, exaggerated styles of acting, costumes, and makeup were used to create surreal images.

In the 1960s, Alfred Hitchcock’s Psycho is one of the first examples of the modern era horror movies in the American horror genre ( Gençöz, 2006). Hitchcock uses human against human to create suspense and fear by creating discomfort and tension between them (Scognamillo, 1996). According to Ziraman (2007), in the 1970s and 1980s, horror films were among the most watched among other film genres, and horror cinema was theoretically studied and taken seriously at the intellectual level. According to Kara (2011), in the 1980s, slasher movies appeared and the most popular slasher movie is Friday the 13th, directed by Sean S. Cunningham, who introduces one of the world’s most famous serial killers to cinema.

The introduction of computer technologies in the 1990s not only allowed computerized technologies to be used more effectively but also allowed the creation of hybrid genres. In addition to cinema, which repeated itself with current horror movie characters by introducing a merge with science fiction, computerized technologies introduced fantastic characters.

In Yavuz’s opinion (2005), in the year 2000, horror cinema changed its style. Whereas the early years, they built their story on horror literature, myths, fantastic monsters, and serial killers, horror movies today allow the viewer to think about the ending of the movie. In 2004, a new horror movie style was introduced with the very first of the Saw series, directed by James Wan, where a new dimension of horror movies entailing riddles and serial killers capturing their prey and then killing them had a major impact (Akyar, 2012). As Krautschick (2012) said, recent horror movies have shifted from traditional monsters to unusual events, unsolvable mysteries, and invisible beings. These new-generation movies infiltrated viewers’ homes by instilling a sense of fear. It is for this reason that the new “thing” generated in these new-generation horror movies permeates people’s personal space. As a result, this can be seen as an attack on our own personal safe places because whether it be Hollywood horror or foreign country horror, these new horror movies utilize invisible beings that can reach us at anywhere and anytime whether it be through laptops, objects on our walls, or simple toys in our homes. As with Paranormal Activity (2007), The Djinn (2007), Red Sands (2009), and Djinn (2010), demonic factors have played a key role in these movies (Şimşek, 2013).

**Turkish Horror Movie History**

When cinema began in Turkey, it specifically started with melodrama and comedy and remained within these boundaries for many years. Different genres were attempted every now and then; however, horror movie production, which never lost its popularity in world cinema genres, always remained at a low in Turkey. Turkish cinema producers have produced almost all genres with the directions and guidance of their viewers; however, among the 6,000 movies produced, only three were horror movies and these productions have gone no further than being replicas of Hollywood productions.

As Şen (2012) defined, the first horror movie produced in Turkish cinema history is Çığlık (Scream, 1949), which was produced by Aydın Arakon; however, no copy has managed to reach today. It is possible that because of this, the very first horror movie in Turkish cinema is referred to as Drakula İstanbul’da (Dracula in Istanbul, 1953) produced by Mehmet Muhtar, which is followed by Ölüüler Konuşmaz ki (The Dead Can’t Speak, 1970) and Şeytan (The Devil, 1974; Kirişci, 2015).

According to Türkül and Kasap (2014), although Turkey has been influenced by Western horror cinema, from the few movies produced in Turkish horror cinema, it can be seen that they are approximately identical replicas of the horror movies produced in America and the West. For example, in 1974, director Metin Erksan directed Şeytan, which was adapted from William Freidkin’s The Exorcist.

Kirişci (2015) has offered some suggestions as to why few number of horror movies were produced in Turkey until the year 2000: (a) insufficient technical infrastructure such as special effects, lighting, and other technologies needed to create a horror movie atmosphere; (b) production companies not willing to move out of their financial comfort zones to produce movies that may not generate sufficient revenue compared with mainstream productions; (c) because Western components of horror do not exist in Turkish literature and the fact that Turkish cinema in general is based on Turkish literature, no horror productions were considered; and (d) the assumption that Turkish viewers would not show any interest in horror movies.

Up until the mid-2000s, horror movies in Turkish cinema were scarce; however, in 2004, and its continuing years, the Turkish film industry had a small burst of horror movies, and back-to-back horror movie productions were launched (Özkaracalar, 2012). In 2004, Turkish cinema experienced a liveliness with regard to genre, the Taylan Brothers filmed the movie Okul (The School), which is a direct adaptation from Doğu Yücel’s novel Hayalet Kitap (The Ghost Book). In the same year, producer Orhan Oguz filmed Böyüm (Magic), which is the first movie of the 2000s to contain religious features. Since 2005, producer Hasan Karacadag has produced many movies with religious features (Tutar, 2015).
As Tunalıgil (2005) mentioned, Hasan Karacadağ completed his education in cinema directing in Japan. In 2005, he filmed Dabbe, which is about the apocalypse. According to the Muslim faith, when the apocalypse is near, a creature named Dabbet’ül Arz will come to earth and start the apocalypse. The creature addresses humans through all possibilities including radio, TV, phone, and the internet. Hasan Karacadağ indicates that the entire content of the movie was taken from the Holy Qu’ran and that Dabbe is the first Turkish Muslim movie to be produced. In new-generation Turkish horror cinema, three producers stick out with both their productions and successful examples: Hasan Karacadağ, Alper Mestçi, and Özgür Bakar.

**Religious Roots in Turkish Horror Movies**

The abovementioned Turkish horror movies are centrally focused on demons (djinns) and integrate Islamic motifs (Kızılcı, 2015). With the increase in the number of horror movies in the 2000s, which have been influenced by Western produced movies, Anatolian folklore is extensively used. Especially in terms of language, although Hollywood cinema’s technical features are used, the storylines are primarily focused on local culture (Tutar, 2015).

Although the Islamic faith currently shapes the Turks’ fears in general, prior to adopting Islam, existing shamanic beliefs and their effects on the Turkish culture also had a great impact in the shaping of these fears. The primary fears shaped by Islam are generally spiritual in nature, such as God, the Devil, Demon. Such examples include Şeytan, Musallat, Dabbe, Semum, and Araf that openly utilize demon and spirit as fear icons specific to the Muslim religion and culture (Sarpkaya, 2015; A. Yurdigül & Zenderen, 2014).

With regard to the names used and preferred in Turkish horror movies, not only do they have religious connotations but they are also religious terms that are directly mentioned in the Holy Qu’ran such as Marid, Semum, Araf, and Dabbe. For example, in the movie Üç Harfliler: Marid (The Three Lettered Ones: Marid), the word Marid shares the same meaning of “mütémerrid,” which means arrogance, stubbornness, and the one with no religion. In the Holy Qur’an, in verses Hac 3, Nisa 117, and Tovbe 101, the word Marid has been used to describe “Şeytan-ı Marid,” which means the Devil of Marid. In the movie Semum, the word Semum is seen in the Holy Qu’ran, verse Hicr 27, and is used to describe a certain fire/flame and the verse notes “We created the djinns from a fireless flame” (Altuntaş & Şahin, 2008). According to Koçak (2006), the folkloric belief in vampires, which is seen in Turkish horror movies, is not a belief specific to the Turkish geography, neither is the widely accepted Middle Ages European exorcism rituals as both are not possible according to the Muslim belief system. It also appears that Turkish viewers are not really horror movie fans. Even though these movies have not developed into a specific sector as of yet, the fact that they are considered to be a new genre suggests that the culture is not very accustomed to the concept of fear in movies. Cinema critic Atilla Dorsay interprets this as “Producing horror movies does not exist in Turkish genes” and notes that the culture of fear is more of a Western product (Temiz, 2013).

Oskay (1981) notes that viewers become immortal gods in the theaters because despite the violence, atrocities, disasters, curses, and so forth, people still remain alive after the movies are over. What Oskay means with the term immortality is that viewer knows beforehand that they will not be harmed and they know what will happen to the character, which characters will die and stay alive. Also, knowing that whatever happens in the movie happens directly to the character and not the viewer creates a sense of relaxation in the viewers as well. A similar view is supported by Dorsay (1986), who states that while watching horror movies, viewers place themselves as the movie’s heroes and by watching these heroes fight monsters, creatures, and killers, they develop a sense of safety knowing that they are not in physical danger. Another sense of safety and pleasure among the viewers is derived from knowing that the scenes in the movies will not happen in real life. This sense of safety and comfort described by Oskay and Dorsay changes from movie to movie and culture to culture. A person from the Muslim faith knows that such movies, where supernatural fantastic monsters/creatures are extensively used in foreign movies, will not appear in real life because this person does not believe in such monsters, will see this creature/monster as imaginary, and will be influenced by it. However, when religious figures like a djinn is used in the movie, because the viewer sees himself/herself as the main character in the movie, he or she will think that they will experience something similar and that the djinn will haunt them, so as a result, he or she will stay away from certain things. The movies influence or the fear from the movie is likely to continue for some time.

Turkish horror movie fans indicate that one of the reasons why the “djinn” factor is of interest to them in these movies is that these djinns are different as are the effects they have on humans. According to the Holy Qur’an, djinn do exist and as the Prophet Muhammed is the prophet of humans, he is also the prophet of djinns too. There are also verses in the Holy Qur’an that mention these invisible beings and when one considers that a Muslim should unquestionably believe all statements in the Holy Qur’an, denying these beings is not open to discussion. Associate Professor Dr. Davut Aydüz at Sakarya University’s Faculty of Theology (as cited by Temiz, 2013) summarizes djinn characteristics as follows:

> When compared to people, djinn’s possess a much greater power. For example, they can cover long distances in short times, they can see people despite people cannot see them, they know things that humans do not know; however, they cannot know the unknown. They too get married and multiply.
These beings are also known to haunt people in some cases as well. To protect themselves from these djinns and demons, magic, and evil energy, people in Turkey have the tendency to carry with them Felak and Nas verses from the Holy Qur’an. Stories from people regarding what they have experienced with these metaphysical beings have been converted into one of the greatest sources of fear (Temiz, 2013). As a result, instead of using foreign horror stories, today Turkish horror movies use storylines about these invisible beings to create a greater sense of fear in creating the new generation of Turkish horror movies.

**Special Effects Makeup in Cinema**

Special effects are a methodology widely used in film, television, and the entertainment sectors to create scenes that are not possible or that are too risky to obtain by normal methods (Yurdigül & Zinderen, 2014). Within this framework, special effects in cinema suggest various changes in the filmed scenes. Although special effects have an important role in reflecting the imagination on to the movie, we come across them frequently and with awe in cinema as they are used to create many of the scenes. Creating realistic scenes that do not exist in real life and by combining them with real scenes not only provide an advantage for the producers but also can be cost effective. Special effects, which can be considered to be a cinematographic trick, are comprised of many different types and utilize a variety of different techniques to produce the illusionary mask, which in turn increases the effectiveness of this illusion (A. Yurdigül & Zinderen, 2014).

There are a wide variety of special effects used in television and cinema, including special effects makeup. During the first years of cinema, special effects makeup was done by hand; however, with the development of computer technologies and films being shot using digitized cameras, special effects makeup is also done through digital mediums.

To evaluate special effects makeup chronologically, in 1931, there is *Frankenstein* played by Boris Karloff, and in 1968, we see *Planet of the Apes*, directed by Franklin Schaffner where latex and special effects materials were extensively used. In 1981, *An American Werewolf in London*, where Rick Baker received an Oscar for best makeup, and with the creation of *Freddy Krueger*, the makeup for these movies was done using traditional methods that incorporated the use of latex, prosthetic molds, and additional apparatuses. With regard to American horror cinema, it is possible to list successful makeup examples. Although not considered to be a horror movie, two films warrant special recognition for the special effects and makeup. With the introduction of technology into special effects makeup, one of the best examples is seen in is the 1991 production *Terminator 2*, which received an Oscar for Best Special Effects and Makeup. Also, it is seen that special effects and special effects makeup are extensively utilized in the 1996 production *The Nutty Professor*, which also won Rick Baker another Academy Award.

With the development of technology and computer programs, it is possible to see visual and special effects that cannot be imagined. This is possible with, but not limited to, programs like Computer-Generated Imagery (CGI), 3D Animation, Chroma Key, Stop Motion, Bullet Time, and Motion Capture. Although these computer-based programs are not used on their own, throughout the filming process, they are used in coordination with other programs to create the special effects seen in these movies. In creating special effects monsters, people’s faces and bodies are depicted differently, open wounds are generated, melting bodies or gashing blood is actively displayed; in addition to the total destruction of a town during a war or during an alien invasion, the demolition of football stadium in seconds, the natural disasters of 2012 movies, the collapse of bridges and buildings like paper cards, and displaying objects that do not exist, and so forth, are among the thousands of effects that can be generated using computer-supported programs.

**Special Effects Makeup in Turkish Horror Cinema**

According to A. Yurdigül and Zinderen (2014), when evaluating the special effects makeup and special effects technology in Turkish cinema, it is distinctly behind the American industry. Horror-based effects are used as fear factors and these are seen as the indispensable features of horror movies. Especially in more recent horror movies, CGI-based effects, sound effects, and makeup effects are among the most important complementary features used.

Prior to the year 2000, a few films in Turkish horror cinema were produced; however, it is not possible to talk about any special effects. In 1974, producer Metin Erksan created *Şeytan*, which is an almost exact replica of the 1973 original production of *The Exorcist*. In this movie, it can be seen that special effects were also attempted to be replicated. After a long period, especially after the year 2000, Turkish horror films began to liven up. The special effects makeup and computerized special effects technologies used in America and other developed European countries were also being utilized. The first area where special effects were used was in commercial advertisements, and then they became indispensable. The very first Turkish film where special effects techniques were used was in the 2004 production of *G.O.R.A* produced by Cem Yılmaz. According to A. Yurdigül and Zinderen (2014), up until *G.O.R.A*, many new CGI-based special effects not used before were successfully demonstrated in the movie. Many special effects techniques such as the blue/green box technique were used as well. After this production, it is seen that CGI special effects also became widely used in Turkish horror cinema.
As of the year 2000, a new era for Turkish horror cinema began, and especially after 2015, approximately 20 to 30 horror films were produced each year, which were very low budget and had minimal success at the box office. From these productions, three main producers have shaped and continue to shape and set the standards for Turkish horror cinema—Hasan Karacadağ, Alper Mestçi, and Özgür Bakar. They not only have shaped the direction of Turkish horror cinema but also have used a variety of different makeup styles and techniques. In Karacadağ’s first movies, makeup is done at a very basic level but computer effects were heavily utilized. The computer effects used were not sufficient for the audience or cinema critics. Within time, improvements were seen in both special effects makeup and computer-generated makeup effects. During his first movies, although special effects consisted of facial painting, in his recent movies, it is seen that the amount of blood-based makeup has increased and even taken to a maximum. However, it is also seen that along with traditional special effects makeup, Karacadağ utilizes computer effects generously in his movies.

In terms of using special effects in Turkish horror cinema, one of the most important films is Dabbe, which was produced in 2006. Although Hasan Karacadağ wrote and produced Dabbe as a horror and suspense movie, we see that the special effects are used extensively to enhance the fear factor. The primary fear icon in the movie is shaped over a supernatural creature; however, the effects are provided mainly by using digital technology. Approximately 35% of the movie is based on special effects (Y. Yurdigül, 2011).

Y. Yurdigül (2011) notes that during the same years that Semum was produced and directed by Hasan Karacadağ, CGI effects were widely used as well. Many special features were used as the fear factors in the movie and these effects were developed over a 6-month period. Creature creation took 4 months. The movie, which is well equipped in CGI-based computer effects, is also known to be the first movie with creatures. The construction of the special effects widely used throughout the movie took approximately 6 months to complete. When examining the proportion of special effects created for the movie, we see that special effects makeup approximately 70% of the movie and programs such as Maya, After Effects, and Motion Builder were used.

As described above, the first examples of Turkish horror movies did not really use hand-based makeup but rather preferred to use computer-supported makeup effects. Alper Mestçi first started his horror cinema journey with Musallat, produced in 2007, where almost no makeup effects were used and tried to scare the audience with the story. In his future films, he uses the same approach. However, because he took into consideration viewer opinion and expectations, in the Siccin series, first produced in 2014, not only did he realize the importance of special effects makeup but also increased the dose of the makeup used to the point where he could no longer give up on it (A. Mestçi, personal interview, January 27, 2018). In his last movies (Üç Hafliler Beddua, 2018; Siccin 5, 2018; Üç hafliler Adak, 2019; and Siccin 6, 2019), special effects makeup was used extensively to the point where it was just as effective as the storyline. However, it was noted that in this movie, CGI effects were used minimally.

In Özgür Bakar’s movies, various attempts to create different stories were successful; however, with regard to visual and makeup effects, the same success was not met. In an extensive interview conducted with Bakar, the producer noted his dissatisfaction with the makeup artists, and that because they were not able to create the makeup effects he imagined, he had to continuously use computer effects to obtain his imaged effects. Bakar also indicated that makeup was of prime importance but due to budgetary restrictions, satisfactory special effects makeup were not possible (O. Bakar, personal interview, January 1, 2018).

From the interviews, it appears that Hasan Karacadağ favors CGI effects more and continues to use them, Alper Mestçi does not favor CGI effect in addition to other visual effects that are computer-generated and prefers traditional makeup effects, and Özgür Bakar only uses CGI effects because of the level of unsatisfactory makeup effects produced by the makeup artists. Despite the fact that all three producers have different preferences, their common denominator rests in their desire to use special effects makeup in scenes that are more violent and bloodier.

**Aim of the Study**

When it comes to assessing whether or not horror movie makeup and special effects actually have a “fright” impact on people is difficult to assess as currently there are no instruments available in Turkish. This creates a significant problem for evaluating the fear factor that is potentially aimed by makeup artists for these types of movies. This exploratory study had two main purposes: (a) to examine the key factors associated with what actually scares Turkish consumers in horror movies and (b) to understand makeup and special effects preferences of Turkish viewers. The aim of this study is to examine the opinions of young Turkish consumers pertaining to horror movies and identify the factors that actually scare them with regard to the role of special effects makeup in horror movies.

Within the light of these two purposes, the answers of the questions below were sought out:

**Research Question 1 (RQ1):** Is there a significant difference between genders in their reasons for watching horror movies?

**Research Question 2 (RQ2):** Is there a significant relationship between the most preferred horror movie type and the most feared horror movie type?
Research Question 3 (RQ3): Is there a significant relationship between the most feared horror movie character and the belief of that character’s existence in real life?

Research Question 4 (RQ4): Is there a significant relationship between the importance of makeup in horror movies and the most preferred type of special effects?

Research Question 5 (RQ5): Is there a significant difference between genders in terms of handmade horror movie makeup effects and computer-generated makeup effects?

Research Question 6 (RQ6): Is there a significant gender difference regarding successful horror movie special effects makeup perceptions between countries?

Materials and Method

For this study, quantitative research methodology was used. According to Gürçüm and Arslan (2016), quantitative research allows the researcher to quantify and measure the subject, process the collected data, conduct statistical analyses, and identify and make predictions accordingly. Also, Mazlum and Mazlum (2017) note that although quantitative research requires the use of standard measurements, people’s perspectives and experiences can be placed in predetermined answer categories that are each assigned a specific number. It is with this method that a large number of people’s perceptions and attitudes pertaining to a subject can be measured. This method makes it possible to compare, statistically collect, and analyze data, while providing a concise and generalizable set of findings.

The population for this study consists of university students in the TRNC who were registered in associates, bachelors, masters, and doctoral degree programs during the 2018–2019 academic year in various universities throughout the island. According to the Ministry of Higher Education in the TRNC, there are a total of 20 accredited universities in the island. In total, for the abovementioned academic year, there were a total of 12,508 students from the TRNC, there are a total of 20 accredited universities in the island. According to the Ministry of Higher Education (MHE) in TRNC, 2019, there were a total of 12,508 students from the TRNC and 54,875 students from Turkey who registered at one of these accredited universities (YODAK, 2020). To calculate the sample size, the following formula was used:

\[ n = N \left(1 + \frac{N}{e^2}\right) \]

where \( N = 67,383 \) (population sample size) and \( e = .05 \) (level of significance). The approximate sample size needed for this study to ensure generalizability is \( n = 397.6 \), which was rounded off to 400. To obtain a study with greater power, the sample size was increased to \( n = 1,000 \).

Using this framework, a total of 1,000 students were randomly selected from the top five universities with the most registered students for that academic year—European University of Lefke (EUL), Cyprus International University (CIU), Near East University (NEU), Girne American University (GAU), and Cyprus Social Sciences University (KISBU; Ministry of Higher Education of TRNC; YODAK, 2020). Prior to administering the surveys to students, ethics committee approval was obtained from EUL (EUL: ÜEK/30/01/02/1819/01). After obtaining ethics committee approval from EUL, this was sent to the abovementioned universities, where ethics committee approval was obtained or permission to conduct the research on campus was given by the university’s rectorate. CIU (reference number: 044-696), GAU (reference number: 03.19. KKTCUNİ/223), and KISBU (reference number: 2019/67) issued ethics committee approvals, and NEU granted permission to conduct research on March 19, 2019.

Prior to conducting the study, the researcher contacted instructors from each university requesting permission to administer the survey in their classes. Upon receiving verbal approval from the course instructor, a date and time were set up for the researcher to meet with the class and administer the survey. After the researcher introduced himself to the students, he briefly explained the study and indicated that he needed volunteers who had watched at least one horror movie in their lifetime. Volunteers were identified and an informed consent was given to each volunteer. After the volunteer student gave written consent, no identifying information was obtained from the participant and a protocol number was given to them to maintain their anonymity. Participants were instructed that if they felt any discomfort with the questions or the study, they could withdraw from the study at any time without penalty. Volunteers who gave consent to participate were then given the survey to complete. No remuneration or extra course credit was offered to the students.

Due to the exploratory nature of the study, the survey consisted of two demographic questions—gender and age—and a total of 23 questions designed to obtain information regarding the participants’ perceptions on and experiences with Turkish horror movies in general, the factors that scared them the most, and the quality of makeup and special effects used in Turkish horror movies.

Data Analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS, v. 24). In addition to conducting a general frequency analysis, data were analyzed according to each research question using either a Pearson correlation or a chi-square analysis. Research Questions 1, 5, and 6 were analyzed using a chi-square analysis and Research Questions 2, 3, and 4 were analyzed using a correlation analysis. Also, to extend the analysis for Research Questions 2, 3, and 4, existing gender differences were also examined using a chi-square analysis.

Results

A total of 1,000 participants were randomly selected from students studying at the top five universities located in the
Correlation analysis suggests a significant relationship between most preferred horror movie type and most feared horror movie \( (r = .410, p = .000) \). Within the same framework, a chi-square analysis was conducted to examine any existing gender differences. No significant gender differences existed in terms of horror movie type \( (\chi^2 = 5.118, p = .529) \), where the most preferred horror movie by both men \((46.7\%)\) and women \((44.9\%)\) was supernatural. However, when gender differences for the most feared horror movie was examined, a significant difference was obtained \( (\chi^2 = 17.571, df = 6, p = .007) \). More women \((76.4\%)\) than men \((65.8\%)\) feared supernatural horror movies. The least feared horror movie type for men \((2.3\%)\) was natural disaster and animal horror, and the least feared horror movie type for women \((1.4\%)\) was science fiction and alien horror movies.

**Research Question 3 (RQ3):** Is there a significant relationship between the most feared horror movie character and the belief of that character’s existence in real life?

Correlation analysis indicated there was a significant but weak relationship between the most feared horror movie character and the belief that the character existed in real life \( (r = .289, p = .000) \). Within this framework, existing gender differences were examined using a chi-square analysis. For the most feared horror movie character, a significant difference was found. Women \((77.1\%)\) feared djinns more than men \((62.3\%); \chi^2 = 63.499, df = 9, p = .000)\). The least feared horror movie character reported by men \((0.5\%)\) and women \((0.0\%)\) was Jason from *Friday the 13th*. With regard to the belief as to whether the horror movie character existed in real life or not, a significant difference was found \( (\chi^2 = 7.541, df = 1, p = .006) \). More women \((60.0\%)\) than men \((51.2\%)\) believed that their most feared character existed in real life.

**Research Question 4 (RQ4):** Is there a significant relationship between the importance of makeup in horror movies and the most preferred type of special effects?

Correlation analysis suggests no significant relationships between the importance of makeup in horror movies and the most preferred type of special effects \( (r = .041, p = .194) \). Within this framework, gender differences were examined using a chi-square analysis. With regard to the importance of makeup in horror movies, a significant gender difference exists \( (\chi^2 = 23.930, df = 3, p = .000) \). More women \((67.1\%)\) than men \((53.9\%)\) indicated that makeup played a very important role in horror movies; however, more men \((3.3\%)\) than women \((0.7\%)\) indicated that makeup in horror movies was not of any importance. When the preferred special effects were examined for gender differences, no significant differences were found \( (\chi^2 = 7.727, p = .259) \). The almost equally preferred special effects for men \((27.5\%)\) were scars and burns special effects along with blood special effects \((27.8\%)\), and the most preferred special effects for women \((27.3\%)\) appeared to be scars and burns special effects.
Chi-square analysis was conducted to examine whether there was a gender difference in handmade horror movie makeup effects and computer-generated makeup effects. With regard to handmade horror movie makeup, results suggest a significant difference exists ($\chi^2 = 10.787, df = 3, p = .013$), where more women (52.3%) than men (50.2%) believe that handmade horror movie makeup effects are more realistic. However, with regard to whether or not computer-generated special effects makeup can replace handmade makeup effects, a gender difference exists ($\chi^2 = 17.652, df = 2, p = .000$). Based on these results, more women (71.8%) than men (60.6%) believe that computer-generated special effects can never replace handmade special effects makeup in horror movies.

**Research Question 5 (RQ5): Is there a significant difference between genders in terms of handmade horror movie makeup effects and computer-generated makeup effects?**

Chi-square analysis was conducted to examine whether there was a gender difference in handmade horror movie makeup effects and computer-generated makeup effects. With regard to handmade horror movie makeup, results suggest a significant difference exists ($\chi^2 = 10.787, df = 3, p = .013$), where more women (52.3%) than men (50.2%) believe that handmade horror movie makeup effects are more realistic. However, with regard to whether or not computer-generated special effects makeup can replace handmade makeup effects, a gender difference exists ($\chi^2 = 17.652, df = 2, p = .000$). Based on these results, more women (71.8%) than men (60.6%) believe that computer-generated special effects can never replace handmade special effects makeup in horror movies.

**Research Question 6 (RQ6): Is there a significant gender difference regarding successful horror movie special effects makeup perceptions between countries?**

A chi-square analysis was conducted to see whether gender differences existed regarding the perceived level of success of horror movie special effects makeup based on countries. Results suggest a significant difference exists ($\chi^2 = 25.512, df = 3, p = .000$). More women (69.0%) than men (56.5%) believe that American horror movie special effects are more successful than the special effects makeup in Europe, Asia, and Turkey. According to men, the order of success is America (56.5%), Turkey (20.8%), Europe (19.0%), and Asia (3.7%), and for women, the order of success is America (69.0%), Europe (17.1%), Turkey (9.7%), and Asia (4.2%). Women’s success order sequencing for country is similar to the basic frequency table (Table 2) done for the exploratory question “which country has the most successful special effects makeup-up for horror movies.”

**Discussion and Conclusion**

This exploratory study aimed to examine the general history of special effects makeup used in horror cinema, especially Turkish horror cinema as well as the religious features used in Turkish horror movies. In examining the most preferred horror movie type, this study suggests that supernatural were the most preferred.

Supernatural horror movies are based on djinns, demons, and invisible creatures. Although Turkey is a country that accepted Islam, verses in the Holy Qur’an, as mentioned earlier, talk about the existence of djinns. When looking into Turkish folklore, for example, in the Epic of Dede Korkut, the life of Turks before Islam and features of Islam are described; however, realistic and supernatural features are also integrated into this story. The stories depictions also contain djinns and other supernatural beings. Regardless of whether the horror movie is Turkish or foreign based, it can generally be said that the Turkish audience fears movies containing invisible creatures.

For a relationship between audience and film to be established, identification is required regardless of the storyline; for any identification to take place, that community’s beliefs, lifestyle, and experiences need to be reflected in the story, whereas empathy and cognitive components need to be activated in the viewer (Cohen, 2011). When looking at the Turkish culture, on one hand, you have that Anatolian folk mythology and the Turkish culture, and on the other hand, you have the existing shaman beliefs before the Turks accepted Islam, and you also have the religious beliefs that have been shaped after Islam, which have instilled fear toward the djinn (Koçak, 2006).

One of the possible reasons why the Turkish community fears djinns may be related to the stories they heard from their elders while growing up, and made to believe that in the future, these djinns can haunt and terrorize them. However, when looking at the other characters that exist in horror movies, Turkish viewers are not afraid of them. One of the possible explanations is because characters such as Frankenstein, vampires, werewolves, and Jason do not exist in the Turkish culture or Turkish literature. Turkish viewers were introduced with these characters with Hollywood’s worldwide expansion. With this in mind, According to Alper Mestçi (personal interview, January 27, 2018), just like the horror codes created with American horror cinema, they have created Turkish horror codes specific to the Turkish community, which is the djinn as it is based on the cultural and religious foundations of this community. With the movie Büyü, which translates into “Magic” in 2004, a new era in Turkish horror cinema began and until the end of 2019, a total of 142 Turkish horror movies were filmed and 99 of them used the djinn factor as the leading character in these movies. Because of this new fear code, Turkish horror movie viewers do not fear horror movie characters from American or other country horror cinema.

When examining the extent of special effects makeup, participants indicated that special effects makeup was very important and that the most sought out or preferred special
effects makeup was burn scars and blood effects. In light with these findings and when Hasan Karacadag and Alper Mestci’s films are examined, it can be seen that in both of their first movies, both producers utilized a great amount of blood effects; however, when viewer requests and expectations were taken into consideration for future productions, the wound and blood special effects makeup in Karacadag’s last movie of the Dabbe series and in Alper Mestci’s Siccin movies was increased greatly.

When asked whether handmade makeup was more realistic compared with computer-generated makeup effects, it was found that viewers were more satisfied from handmade special effects makeup. Just like the viewers, the producers interviewed for this study also indicated that they preferred handmade special effects makeup compared with computer-generated makeup effects. However, under certain circumstances, because the producers were unable to obtain the desired and imagined effects from the makeup artists, they had no other choice than to revert to computer-generated special effects. Considering that there are very few special effects makeup artists in Turkey, this creates a significant problem for the producers.

When American horror film special effect makeup was compared with the special effects makeup in Turkey, it became evident that American horror movies were far much better. Producer Alper Mestci notes that the special effects makeup in Turkish horror cinema can never be compared with those of American cinema because no such sector in Turkey exists. In the United States, very easily you can find a prosthetics for a torn off arm or leg; however, in Turkey, these effects need to be created independently and this requires a specialized team. Also, the United States and other developed countries have many professional schools that specialize in special effects makeup. For example, seven-time Oscar winner Rick Baker has a cinema makeup school in Los Angeles. In addition, Tom Savini, who has done many special effects makeup in Hollywood established the Tom Savini’s Special Makeup Program at Douglas Education Center in Pennsylvania. Exorcist special effects makeup artist Dick Smith also has a professional training program, Dick Smith Special FX Makeup Training School in Connecticut. In the United Kingdom, one of the leading special effects and makeup training institutes is the Gordon Studio Prosthetics and Makeup FX School. Turkey has no institutions that specialize in special effects makeup training. Mestci also noted that the special effects makeup artist working with him was trained in the United Kingdom.

Although there is a potential of horror movies among young Turkish people, the makeup and special effects in horror movies that they watch are important for them. However, from the results of this study, it becomes evident that the art of special effects makeup in Turkey is significantly lacking and insufficient. The special effects makeup techniques used 90 years ago to create Frankenstein or even 40 years ago to create The Thing or The Fly are not even used in today’s Turkish makeup artists, which creates a huge disadvantage for the producers and leaves no other choice than to use computer-generated makeup effects heavily in their movies.

Limitations

Like every study, this study too had its limitations. The very first limitation was regarding the sample inclusion criteria. Although in Cyprus there are a total of 20 accredited universities with more than 100,000 students in total, approximately 15% are of TRNC national, 55% are Turkish, and the remaining 30% of students are from various foreign countries. Only Turkish and TRNC citizens were included because they share a common language, Turkish, and they share a common culture, being of Turkish origin. Because students from other countries are taught English as their second language, Turkish is not a globally recognized language. As a result, foreign students were excluded from this study.

The second limitation pertains to generalizability. As this is an exploratory study, concerns regarding generalizability need to be addressed. As mentioned earlier, only students from the top five universities with the most number of students were chosen for the sample.

A third limitation is regarding the statute of the study. As this is one of the first studies conducted in this field in the TRNC, there are no data that exist to support or contradict the findings obtained. Although some of the findings can be corroborated with interviews conducted with Turkish horror movie producers, they may be biased and subjective. Therefore, these findings must be taken as a baseline exploration into a very new sector, be interpreted with caution, and not generalized to the entire horror movie genre.

A final limitation for this study is that within the past few years, a new era has begun for Turkish horror cinema, where more than 30 films per year are produced and now researched academically. However, these researches are primarily focused on Islamic motifs. Although these studies concentrate on the Turkish culture, none have examined the special effects makeup used in these movies. As a result, there is a serious deficiency with regard to literary resources pertaining to special effects makeup in Turkish horror cinema.

Contributions to the Field

Because there are no existing studies that examine the effects of special effects makeup in Turkish horror cinema, this study, although exploratory in nature, is a first that will help set the foundation for future research. The theoretical foundation, survey results, and the interviews conducted with leading producers of Turkish horror cinema all suggest that special effects makeup in Turkey is insufficient and not used as widely as it should be. This study may offer sufficient
justification for the consideration of establishing a special effects makeup sector in the near future. Also, with the future development of a new sector, there will be a need for schools, training facilities, and professional institutions aimed at training professional special effects makeup artists in Turkey. Also, although this study can be considered as a baseline field observation, detailed interviews with the producers suggest that by using key themes associated with the Turkish culture, folk culture, and religious beliefs, Turkish horror cinema is effective and successful in establishing the primary scare factor with the Turkish audiences. However, more detailed cultural studies are needed to examine other scare factors that can be used to increase the success of Turkish horror movies.

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References
Abisel, N. (1995). _Popüler Sinema ve Türler_ [Popular Cinema and Genres]. Alan.

Ekbulut, D. (2012). _Sinemanın İlkleri, Korku Sinemasi_ [Cinema’s Firsts, Horror Cinema]. Etki.

Akyar, P. (2012). _2000 Sonrası Türk Korku Sinemasında Yer Alan Dini Göstergeler_ [Religious Indicators in Turkish Horror Cinema After 2000] [Published master thesis]. Firat University, Institute of Social Sciences.

Altuntas, H., & Şahin, M. (2008). _Kur’an-ı Kerim Meali_ [The Meaning of the Holy Quran]. Ostim Vocational Training Center Directorate.

Cohen, J. (2011). Audience identification with media characters. In J. Bryant & P. Vorderer (Eds.), _Psychology of entertainment_ (pp. 183–198). Routledge.

Dabağyan, L. P. (2004). _Zaman Tünelinde Tüm Yönleriyle Sinema Dünyası_ [The World of Cinema in All Aspects in the Timeline]. IQ Culture and Art.

Dorsay, A. (1986). _Be yazperdede Kırmızı Filmler_ [Pocket Books.

Elsaesser, T. (2003). _Sinemannın İlk Dönemi_ [Firsts, Horror Cinema]. Psinema. _Science and Technique_ , 458, 82–86.

Gürçü, B. H., & Arslan, A. (2016). Advantages of mixed method in textile design research. _The Journal of International Social Research, 10_(50), 497–509.

Kara, E. (2011). _Korku Filmleri Seçkisi_. _Sinefil Journal_ [Horror Movies Selection]. Istanbul Boğaziçi University Mithat Alan Film Center 27 June–August, 23–28.

Kirişci, M. (2015). _Korkusuz Türk Sinemasi_. _Oteki Sinema_ [Fearless Turkish Cinema. Oteki Cinema]. http://www.otekisinema.com/korkusuz-turk-sinemasi/

Kızıla, M. (2015). _Türk Korku Sinemasi’na Genel Bir Bakış_ [An Overview of Turkish Horror Cinema. Oteki Cinema]. http://www.otekisinema.com/turk-korku-sinemasina-genel-bir-bakis/

Koçak, B. (2006). _Doğu-Bati Arasında Türk Sinemasi:_ [East and West: An Evaluation on Horror Films]. _Journal of Communication Faculty, 26_(1), 93–104.

Krautschick, L. R. (2012). _Attacks on “safe zones”: How Hollywood horror infiltrates private spheres._ SYN/ESTHESIA Communication Across Cultures Communications Journal, 1(3), 60–71.

Mazlum, M. M., & Mazlum, A. A. (2017). Determination of research method in social sciences. _Route Educational and Social Science Journal, 4_(4), 1–21.

Odell, C., & Le Blanc, M. (2011). _Korku Sineması_ [Horror Cinema] (Ali Toprak, Trans.). Kalkedon.

Oskay, Ü. (1981). _ Çağdaş Fantazya, Popüler Kültür Açısından Bilim-Kurgu ve Korku Sineması_ [Contemporary Fantasy, Science-Fiction and Horror Cinema from a Popular Culture Perspective]. Der.

Özkaracalar, K. (2012). _Horror films in Turkish cinema: To use or not to use local cultural motifs, that is not the question_. In P. Allmer, E. Brick, & D. Huxley (Eds.), _European nightmares horror cinema in Europe since 1945_ (pp. 249–260). Columbia University Press.

Sarpkaya, S. (2015). _Türk Korku Filmlerinin halk bilimi açısından incelenmesi_ [Investigation of Turkish horror cinema in Europe since 1945]. _Rote Educational and Communication Across Cultures Communications Journal, 1_(3), 60–71.
after 2000. *The Journal of International Social Research*, 7(32), 711–721.

Tutar, C. (2015). Türk Korku Sinemasının Yapısal Engelleri: Sosyo-Kültürel Bir Bakış. Gümuşhane University [Structural Barriers of Turkish Horror Cinema: A Socio-Cultural Perspective. Gumushane University]. *E-Journal of Faculty of Communication*, 3(2), 247–274.

Yavuz, F. (2005). Bastırılanın Kaçınılmaz Geri Dönüşü: Korku Sineması Sinemasal Journal [The Inevitable Return of Repressed: Horror Cinema Cinemasal Journal]. Dokuz Eylül.

YODAK. (2020). *Ministry of higher education of TRNC*. http://yodak.gov.ct.tr/

Yurdğül, A., & Zinderen, E. İ. (2014). Türk Sinemasında Özel Efekt Teknolojileri Aracılığıyla Oluşturulan Korku İkonları. Ataturk University [Fear icons created by special effects technologies in Turkish cinema. Ataturk University]. *Global Media Journal: TR Edition*, 5(9), 372–401.

Yurdğül, Y. (2011). 2000 Sonrası Türk Sinemasında Özel Efekt Kullanımı [Use of Special Effects in Turkish Cinema after 2000]. In Ö. Yılmazkol (Ed.), *2000 Sonrası Türk Sinemasına Eleştirel Bakış içinde* (pp. 207–208). Reader Library.

Ziraman, Z. (2007). 1990 Sonrasi Japon Korku Sinemasında İntikamci Ruh Ögesi [Avenging Spirit Item in Post-1990 Japanese Horror Cinema] [Published master thesis]. Dokuz Eylül University, Institute of Fine Arts.