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Illuminating the Cinematic Palette: A Comparative Analysis of Lightning Techniques and their Emotional Impact in Horror Films

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ABSTRACT

Aim of the Study: This study investigates the critical role of lighting and its ability to establish mood and enhance emotional responses. The study examines how these elements contribute to the defining characteristics of the horror genre, including tension, fear, and suspense.

Methodology: The research employs a comparative analysis of lighting techniques, using case studies from iconic horror films to illustrate their application and effect. This approach combines qualitative analysis of visual elements with a theoretical exploration of their psychological and emotional impact on audiences.

Findings: The study reveals that specific lighting techniques play a pivotal role in emphasizing narrative themes such as isolation, horror, anxiety, and suspense. Techniques like low-key lighting and the interplay of shadows amplify feelings of unease, while color temperature and light direction heighten emotional intensity. Additionally, it uncovers how modern lighting innovations are shaping the visual language of horror films, catering to evolving audience expectations and cultural nuances.

Conclusion: The study concludes that lighting is an essential tool in the horror genre, directly impacting both the emotional involvement of the audience and the overall narrative atmosphere. With an examination of current lighting trends and their use across various subgenres and cultural contexts, the study offers valuable insights into the evolving techniques in cinematic horror, benefiting filmmakers, scholars, and enthusiasts alike.

Keywords: Cinematic Palette, Lighting Techniques, Comparative Analysis, Horror Film, Mood Impact.

1. INTRODUCTION

In the world of cinema, light is a storyteller itself. The shadows and the highlights contribute to the narrative fabric of films. Light and shadow serve as a powerful tool in the narrative of horror films. This research embarks on an exploration, delving into the artistry of illumination within the horror genre.

When it comes to film genres, horror films are very specific one that requires some very explicit lighting techniques. (Wang, 2022) Drawing inspiration from various works by renowned scholars in the field, we undertake a comparative analysis of lightning techniques, unraveling their profound influence on the psychological impact of horror films. By dissecting the use of light manipulation, this study aims how varying luminous compositions contribute to the evocation of distinct moods, ultimately shaping the viewer's experience in the realm of cinematic fear.

In 1920s the audience wanted horror cinema, and it was delivered to them. This decade and the one that followed are considered to be the golden age of horror, with many films that are considered as classics today, being produced. Films such as Nosferatu (1922), The Phantom of the Opera (1925), Dr. Jekyll and Mr. Hyde (1920), and The Cabinet of Dr. Caligari (1920) are some of the greatest films of all time, even now. But without the elements of today, such as sound, color, special effects, how have these films managed to produce the same types of reactions? Without the modern horror elements, horror cinema of the past century was still capable of spooking the viewers. (Bonilla)

Hence, the most powerful tool in filmmaking is lighting. Being able to manipulate lighting can create a great number of effects that are used to convey feelings, emotions and even responses in the audience. Three-point lighting is the most common form of lighting. It comprises of three different lights being pointed at an object to highlight, enhance, and give importance to it (Sauchelli, 2014) Even though, it is still used today but it was the most important way of lighting before colored films. High-key lighting; the reduction of lighting ratio in a scene, and low-key lighting; the creation of a more even display of dark and bright, were two other important filming techniques. The High-key lighting creates more of a contrast and was more popular in horror films. The great level of contrasts enhanced the level of suspense in the dramatics of the films. (Bonilla)

Lighting plays a crucial part for establishing the tone and the mood of a scene. It has the ability to deepen the visual story, evoke strong feelings, and set the mood. Lighting may be utilized to control an audience's mood and response. Research has demonstrated that lighting may significantly affect our emotions, actions, and bodily reactions. Because various tones and light intensities can cause various emotional states. Filmmakers take great effort to select the right kind and quality of light for each scene. Lighting is frequently employed in horror movies to evoke tension and dread. (Sewell, 2023) Filmmakers can evoke a sense of mystery and unpredictability that unnerves viewers by employing shadows and darkness to hide scene details.

Researchers research how colors affect viewers psychologically, considering their past associations with the color (associative meaning-making, meaning-giving), cognitive psychology, and the evolutionary perspective, which holds that colors have an innate quality that is encoded into our DNA through evolutionary experiences. From my own experience, I've discovered that colors have the power to establish a film's "mood," which in turn affects the viewer's mood. Though cognitivists Carl Plantinga, Robert Sinner brink, and Daniel Yacavone are among the few who have tackled the subject of film mood, this facet of viewer immersion has been largely disregarded. Therefore, I suggest that more research be done on the ways that a film's tone affects both "art mood" and "human mood." (Sinnerbrink, 2012)

Horror genre also attracts the viewers because of having thrill, fantasy, action and suspense in it. Evolution process in the history of horror films continued for the reason that the level of fear that is portrayed by the film is huge in part due to the special lightening effects that are present (Mudassar Hussain Shah, 2016). As previously mentioned, color representation is not the only way to use color. Instead, it's evolved into a technique for elevating the amazement and drawing the audience deeper into the virtual reality of the movie. Gunning goes on to say that classical aesthetics "tended to privilege the more flexible and changeable nature of color over the art of delineation/drawing form." (Giovanna Fossati, March 6, 2015). As I've said before, colors have been employed in films as creative and psychological devices. Psychology covers a more scientific approach focused on the study of the mind, whereas creative methods concentrate more on disciplines like aesthetics and phenomenology or the study

of the spectator experience. Torben Grodal takes a more evolutionary, scientific approach, to start. He invented the "PECMA flow," as he puts it. This is a broad model of visual aesthetics, with PECMA (perception, emotion, cognition, motor action) represented by the acronym. According to Grodal, the way various cognitive systems function in the brain and its architecture influence how we view films. He refers to the PECMA model's "direct drive approach" as beginning as light information reaches the eyes (Giovanna Fossati, March 6, 2015)

The four components in 'Film Language' i.e. cinematography, mise-en-scene, editing and audio have played crucial role in horror film genre not just technically but also can be impactful for the development of plot of a horror films. (Addley Bromeo Bianus, 2014) For horror movies, to express fear for the audience, remarkable combinations of colors and lighting are employed. (Fu, 2016) In research, a common definition of harmonious color combinations is "colors that are said to generate a pleasant effect when seen in neighboring areas". The color emotion features improve the horror scene recognition effectively (Jianchao Wang, September 26-29, 2010). The main role of color in the design of horrific characters is the transmission of varied sentiments through psychological suggestion and hence triggering the horror sense. All colors are able to trigger the horror sense once they coincide with the experiences of everyday life. Meaning that, negative significance should be given to all the colors used in the design of a horrific character. (Cherry, 2009)

Lighting techniques help greatly in creating an uncomfortable and spooky atmosphere that is necessary for raising the audience's sense of suspense and terror. The suspense and excitement of these cinematic visions may be increased by carefully adjusting light in order to confuse the viewer, highlight character contrast, and increase tension (Duchaney, 2015). Developing skills in the art of horror movie lighting may turn a picture into a masterpiece. It has the power to create or destroy a movie. It is important to investigate the ways in which different lighting techniques such as backlighting, low-key lighting, and practical lighting effects, might be employed to generate a feeling of anxiety, mystery, and tension in horror films. Many researchers argue that light is the most important factor in horror movies which can either uplift the movie or can be the cause for its downfall (Safdar & Abbasi, 2023; Rauf & Kanwal, 2020).

Lighting effects and colors enhance and ease viewer immersion in the fictional reality. Many experts in film phenomenology and aesthetics agree that colors are used as both psychological and artistic tools, manipulating viewers' emotions, level of anxiety and adding visual texture to objects in horror films. By using the perfect colors, they represent deeper meanings or are simply used for aesthetic purposes. Lights act as a bridge between human imagination and fantasy, to build a bond with the audience which creates a scenario of fear and anxiety. In early cinema, colors were used to heighten our sense of vision and express emotions through color filters and chromatic variety. Many cinematographers faced unique problems and challenges and then became professional artists who are now balancing the demand of story, studio, and characters. Hollywood cinemas enhanced various illustrations, sound effects, volume, and storytelling in this genre. (Sinnerbrink, 2012) Low-key and chiaroscuro lighting are usually the types of lighting used by a horror film. These styles tend to be more dramatic, and they create more shadows than the high-key lighting (Seyler, 2019). The shadows that uplighting creates on the face, heavily distorts facial features, and causes the audience discomfort as humans are accustomed to sunlight, which shines from above onto the face (Renée, 2018).

A movie greatly depends on the experience that formed in the mind of the audience about the sources of fear in the visual image shown on the screen. During the film, the audience is on edge regarding the unknown that hides in the dark spaces, or that falls under a spot of light. He is also afraid of the known, which can be seen, which was found harmful during the film and was related to a specific level of lighting. He may associate the gray-toned low-key lighting with the character, causing terror or fear during the events of the movie (Abdul Shakoor, March, 2023). The lighting conditions prepare the audience for something bad about to happen in a horror movie. (Winter, 2014)

Horror is primarily a cinematic genre, whereas science fiction is primarily a literary genre. (Sipos, 2010) The flicker of a candle, the neon, or the shadows in a dimly lit corridor—all play crucial roles in crafting an immersive experience for the audience. By examining these elements, we strive to figure out how compositions contribute to the evocation of distinct moods. In the realm of cinematic fear, the flick of a switch can transform a scene from suspense to terror. At the core of our investigation lies the recognition that lighting is a potent storyteller that communicates emotions. The interplay of light and shadow goes beyond aesthetics. This research aims to know the impact of lighting techniques on the viewer's emotional response. How does the harsh, unforgiving light intensify fear, and how does subtle, soft illumination evoke suspense? By highlighting these components, we seek to offer insights into the mechanics of fear in cinema. In essence, this exploration into the artistry of illumination within the horror genre is a journey into the language of light in storytelling. As we navigate through the shadows cast on the silver screen, we aspire to unravel the secrets that lie within the play of light, its role in shaping the atmospheres that stays in the minds of the audience long after the credits roll.

1.1   Study Objectives

1. To figure out a relationship between the viewers' anxiety levels and the lighting's intensity.

2. To investigate the impact of lighting on mood of viewers that cultivate from horror movies.

1.2   Research Questions

1. How do viewers experience the level of anxiety by lightning intensity and color influence in horror films?

2. How do the lightning technique in old horror films differ from the modern horror films and is there any impact on the Audience emotions?

1.3   Problem Statement

The horror film genre mostly uses visual effects to manipulate viewers' perceptions of terror, tension, and raised emotions. Of them, lighting is one of the most important in determining the tone and ambiance of horror stories. Nevertheless, despite its importance, there is a notable lack of academic literature that thoroughly investigates and examines the many lighting strategies used in horror films and their impact on viewers' feelings of suspense and terror.

Thus, a thorough examination of the small ways that various lighting approaches affect tone and viewer engagement in horror films is necessary. Our goal in filling this study gap is to give academics, directors, and cinematographers a greater understanding of the complex relationship between lighting settings and viewers' emotional reactions in the context of horror films. This study compares various lighting styles used in several classic horror films to identify patterns, trends, and the fundamental ideas that support the use of lighting to effectively evoke suspense and terror in cinematic storytelling.

2. LITERATURE REVIEW

The visual language employed in horror films, shedding light on the aesthetics that contribute to the genre's unique impact. Sipos explores various elements of horror film aesthetics, including cinematography and lighting, to understand how they collectively create an immersive and fear-inducing experience for the audience. Cinematic Aesthetics in Horror: Sipos delves into the broader concept of cinematic aesthetics within the horror genre. By examining how filmmakers visually craft fear, he contributes to the understanding of the deliberate choices made in cinematography and lighting to evoke specific emotions. (Sipos, 2010) A comprehensive exploration of the intricate relationship between color and subjective experiences. By examining the emotional and perceptual impact of color in cinema, the research contributes valuable insights to the understanding of how filmmakers harness this visual element to shape the subjective dimensions of their narratives (Flückiger, 2017)

To explore the intriguing interplay between negative emotions and the richness of product experiences. The following literature review delves into key themes and findings from their research, shedding light on the unique contribution of this work to the understanding of consumer emotions and product engagement (Fokkinga, 2012).

The intersection of media psychology and horror film studies, contributing valuable insights into the cue-specific affect and emotional dynamics of horror film consumption. The research is poised to advance our understanding of how specific cues within the horror genre shape emotional responses, offering both theoretical and practical implications for media researchers, filmmakers, and content creators. (Bonilla) The interdisciplinary study of film, semiotics, and psychology. By employing a semiotic approach to analyze the role of lighting and color in horror movies, the research aims to deepen our understanding of how visual elements contribute to the embodiment of fear in cinematic narratives. The literature review is anticipated to provide a comprehensive overview of relevant theories and prior research, setting the stage for the semiotic analysis presented in the study (Sawsan Mohammed, 2020).

Tamborini and Stiff explained the interdisciplinary study of media psychology, horror film studies, and audience reception. By investigating the predictors of horror film engagement, the research sheds light on the complex interplay of psychological and social factors that shape individuals' attraction to frightening cinematic experiences. The literature review is anticipated to provide a comprehensive overview of relevant theories, methodologies, and prior research, laying the groundwork for the empirical analysis presented in the study. (RON TAMBORINI, 1987) The relationship between horror films and the emotional responses, or affect, of the viewers by camera angles and lightning technique. A "corporeal model of viewership" implies an emphasis on the physical and bodily aspects of the viewing experience. (Reyes, 2018) The lightning technique refers to a specific editing technique used in horror films, where a sudden, loud sound is accompanied by a bright flash of light. This technique is often used to startle the audience and create a sense of fear or suspense. Harrison's article focused on broader psychological and physiological factors that contribute to fright reactions, such as individual differences in personality traits, context, prior knowledge, and cultural norms (Kristen Harrison, 1999).

Carl Royer discuss the potential implications of this theme for horror filmmakers and audiences. The authors argue that the use of parades as a visual motif in horror films allows filmmakers to explore complex themes such as identity, belonging, and social isolation in new and innovative ways. For audiences, it provides a visually stunning and emotionally resonant experience that challenges traditional notions of horror filmmaking (Carl Royer, 2005). The use of visual effects to represent magical elements allows filmmakers to explore complex themes such as identity, tradition, and spirituality in new and innovative ways. For audiences, it provides a visually stunning and emotionally resonant experience that challenges traditional notions of horror filmmaking (Uchechukwu Chimezie Ajiwe, 2023).

While exploring the role of narrative structure in creating affective understanding, the narrative structure can be used to manipulate the viewer's emotional response, creating a sense of tension, suspense, or catharsis. They also discuss the role of cinematography, lightning, music, and sound design in creating affective understanding (Hee Lin Wang, 2006).

The authors (Abdul Shakoor, March, 2023) argue that the film's visual discourse reinforces traditional gender roles and values through its representation of characters and settings. They identify several examples of this, such as the portrayal of Dracula as a patriarchal figure who values masculinity over femininity, and the depiction of women as nurturing caregivers. The authors also discuss the use of color to convey meaning, such as the association of blue with male characters and pink with female characters. They highlighted the lightning technique which can increase the level of anxiety.

The artistic capabilities of lighting and color in highlighting the cinematic scenes in horror films (place and characters) based on the lighting source, the angle of its fall, its contrast, color controlling, as well as the analysis of the artistic employment of lighting language in horror films from the semiotic entrance. The descriptive-analytical method is used. The results indicated that we cannot consistently associate low-

key lighting and low contrast to horror movies as creativity occasionally comes in defying the rules. Moreover, the cinematographer's inventiveness can be seen in how they alter the optical meanings of horror films on a syntagmatic and paradigmatic level within the film. (Meirick, 2023) Some argue that genre films are not just about telling a story but also about creating a specific mood and atmosphere through visuals. He emphasizes the importance of understanding the visual language of each genre and how it can be used to convey meaning and emotion to the audience. (Draven, 2012) Duchaney argues that horror films serve as a barometer for the cultural and political climate of their time. He suggests that horror films can provide insight into the fears and anxieties of their audiences and can be used as a lens through which to understand broader societal issues. Overall, "The Spark of Fear" is a thought-provoking exploration of the relationship between technology, society, and horror cinema. (Duchaney, 2015)

Romano writes about pop culture, media ethics and adds movie reviews in his writings. In films, red can be employed in a number of ways to highlight particular themes. In order to hint at the blood that would be spilled in the Tanz Dance Academy, the movie Suspiria used the color red liberally throughout. The color palette utilized by Dario Argento, the filmmaker of Suspiria, is described as "garishly psychedelic, which mixes all this red with electric greens and blues and jagged black-and-white Expressionist patterns." The vivid colors in Walt Disney's Snow White and the Seven Dwarfs served as the inspiration for this film's color scheme, which is crucial to creating the strange and dreamlike mood that contributes to Suspiria's visual appeal. (Romano, November 09, 2018) Horror films have been used to critique issues such as class, gender, sexuality, and race. He examines how horror films have been used to challenge traditional gender roles, as seen in films like "Carrie" and "The Silence of the Lambs." Towlson also explores how horror films have been used to critique issues of race and ethnicity, as seen in films like "Blacula" and "Night of the Living Dead." (Towlson, 2014).

3. THEORETICAL FRAMEWORK

3.1 Encoding-Decoding

Encoding is the process in which a message is first 'encoded', that is, transformed into an understandable sign or symbol system. Once received, the message is 'decoded'; that is, the signs and symbols are interpreted by the receiver.

In this research, the lighting techniques and color palette of horror films are analyzed in-order-to find their relationship with the mood changes of the audience. The lighting and color palette serve as the encoded messages, which are decoded by the audience to form a change in their moods. Different types of lighting techniques are decoded differently by the audience. The decoding also differs from person to person, according to his or her past beliefs and experiences.

3.2 Cultivation Theory

Cultivation theory focuses on the effects of long-term television viewing on an individual's perspective of the world around them. According to this theory, the audience form their perspectives in accordance with what is shown to them on the television. It greatly impacts their way of thinking and meaning assigning.

According to this research, the lighting techniques and color palettes of horror films have a preassigned meaning in the audience's mind. This is because the long-term television viewing has led them to interpret meanings according to the inculcation by the television.

3.3 Meaning making Theory

The Meaning making theory focuses on the method in which the audience interprets the media to personally effect themselves. The various meaning-making perspectives assert that when people use the media to make meaning and to intentionally induce desired experiences, there often are significant results, some intended and others unintended and unwanted.

In the light of this research, the theory indicates that the audience obtains unintended and unintentional results from the exposure of lighting techniques and the color palette of the horror films. This can result in feelings of fear, anxiety, and discomfort in the audience.

4. METHODOLOGY

According to the current study, the survey research method is employed to examine the lightning and cinematic palette effects on viewers.

4.1 Population

Male and female of the twin cities residents made up the study demographic. The selected population served as the study's analytical unit. Researchers employed a stratified sample technique for this goal.

4.2 Sample Size

150 people, both male and female, made up the study's sample. A questionnaire was used to gather the necessary information.

4.3 Questionnaire

A standardized questionnaire was developed to collect required feedback. The questionnaire contained closed questions so that the answers can be easily understood.

5. RESULSTS

The interaction of light and shadow is clearly vital in determining the general atmosphere and psychological impact of the horror genre, according to the questionnaire on the investigation of illuminating the cinematic palette through a comparative analysis of lighting techniques and their influence on mood in horror films. The majority of participants agreed that lighting plays a critical role in establishing suspense, tension, and terror in horror stories.

Respondents also emphasized the deliberate application of contrast and color temperature to affect the audience's psychological response. The overall answers to the questionnaire highlighted the complex interplay between lighting decisions and the emotions they arouse, offering insightful information on the difficult craft of creating dread through visual storytelling in the horror film industry.
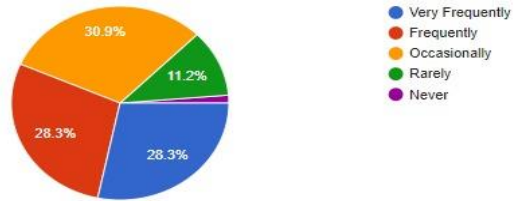
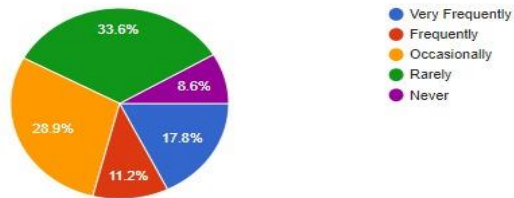Attaching the responses of the respondents:
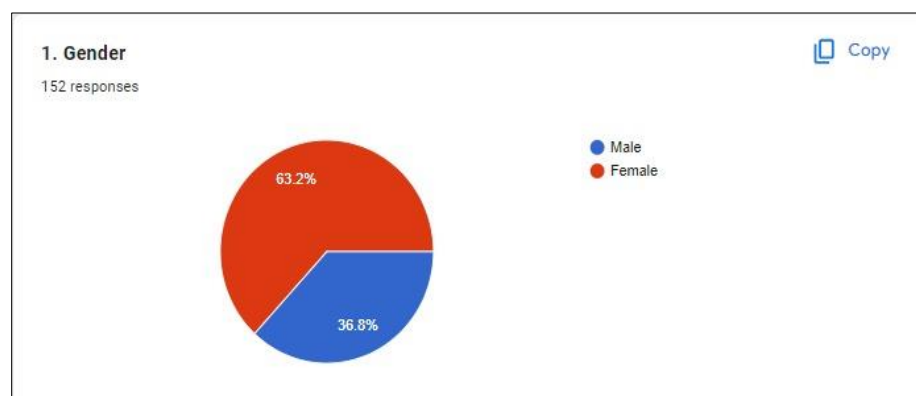
2. How often do you watch movies?

152 responses

- Very Frequently
- Frequently
- Occasionally
- Rarely
- Never

30.9%
11.2%
28.3%
28.3%

3. How often do you watch horror movies?

152 responses

- Very Frequently
- Frequently
- Occasionally
- Rarely
- Never

33.6%
8.6%
17.8%
11.2%
28.9%

4. Do you think lighting affects the mood of viewers while watching horror films?

152 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

41.4%
9.2%
46.7%
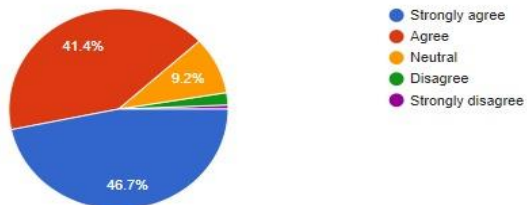
5. Which aspect of the cinematic palette do you believe has the most significant impact on the horror film's atmosphere?

151 responses

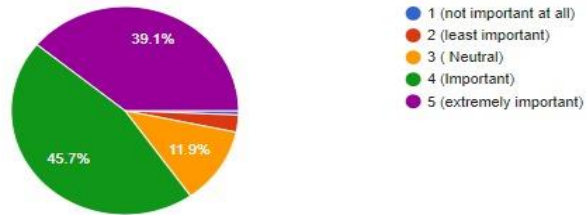- Lighting and color grading
- Cinematography
- Set design
- All of above
- None of these
- Color grading

43%
6%
17.9%
31.8%
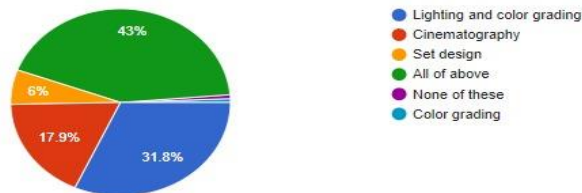
6. On a scale of 1 to 5, how important is the role of lightning in horror films?

151 responses

- 1 (not important at all)
- 2 (least important)
- 3 (Neutral)
- 4 (Important)
- 5 (extremely important)

39.1%
45.7%
11.9%

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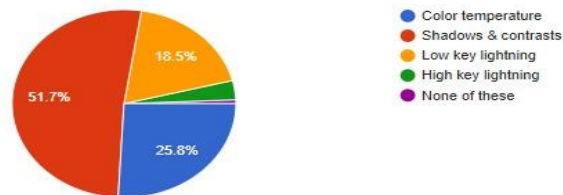**7. Which specific lightning technique do you think most contributes to the mood in horror films?**

151 responses

- Color temperature
- Shadows & contrasts
- Low key lightning
- High key lightning
- None of these

51.7%
18.5%
25.8%

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8. Do you think lighting intensity can increase your level of anxiety in horror films?

150 responses

- Strongly agree
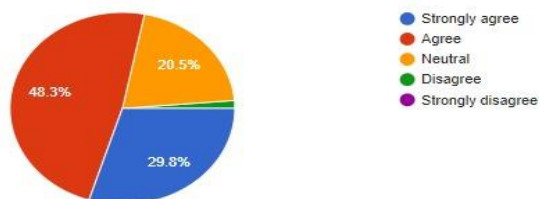- Agree
- Neutral
- Disagree
- Strongly disagree

48%
15.3%
33.3%
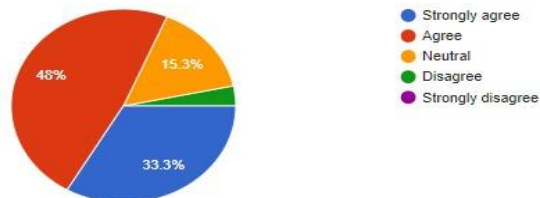
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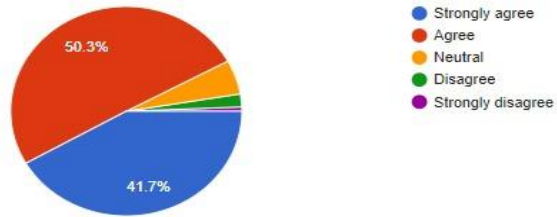**9. Do you think the impact of color temperature affects viewers emotional level while watching horror films?**

151 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

48.3%
20.5%
29.8%

Copy

10. Do you agree that lighting can affect the overall quality of a horror film?

151 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

50.3%
41.7%

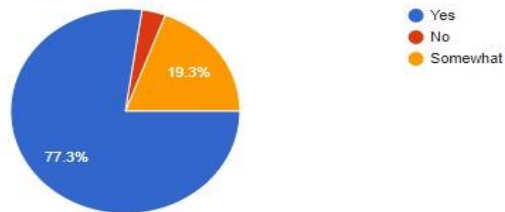**11. Do you agree that certain lightening colors are more effective in creating tension among viewers?**

150 responses

- Yes
- No
- Somewhat

77.3%
19.3%

12. Does the lightning technique in old horror films differ from modern horror films?

151 responses

- Very Much different
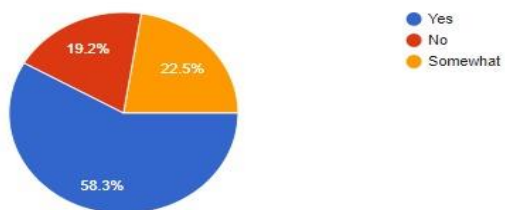- Somewhat different
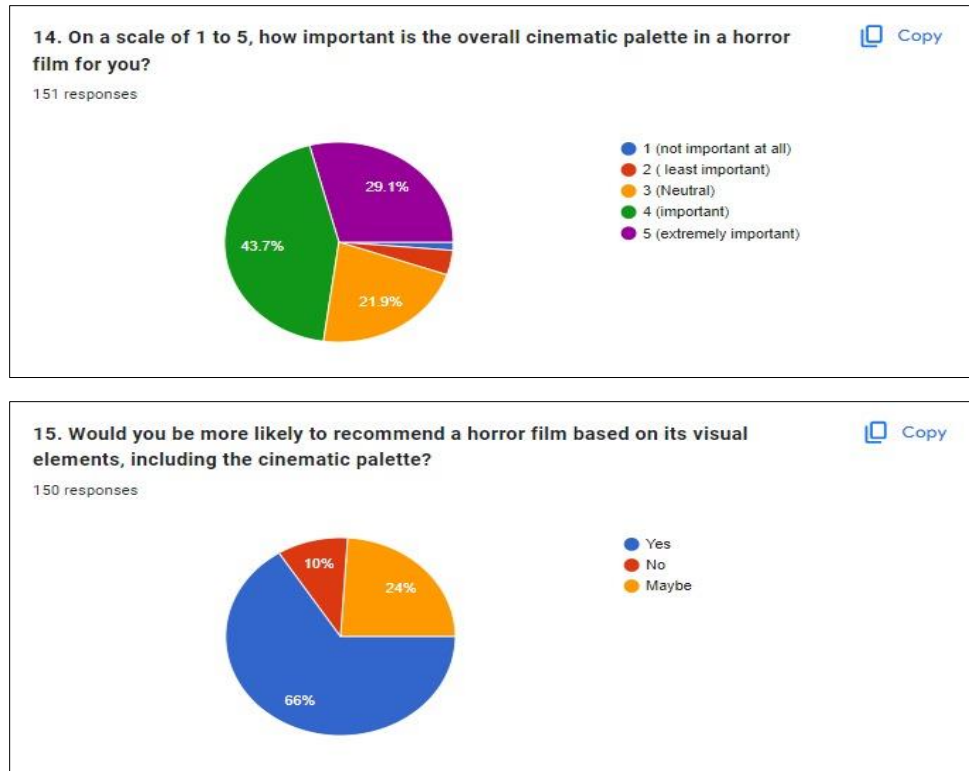- Neutral
- Not that much
- None

35.1%
8.6%
51.7%
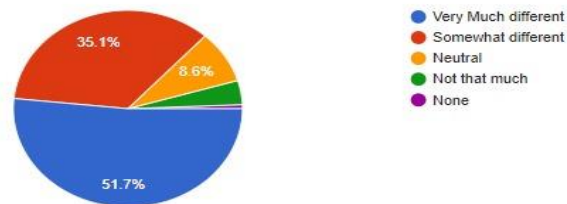
13. Have you ever found yourself more immersed in a horror film due to its visual elements and lightning technique rather than the storyline?

151 responses

- Yes
- No
- Somewhat

19.2%
22.5%
58.3%

14. On a scale of 1 to 5, how important is the overall cinematic palette in a horror film for you?

151 responses

- 1 (not important at all)
- 2 (least important)
- 3 (Neutral)
- 4 (important)
- 5 (extremely important)

29.1%
43.7%
21.9%

15. Would you be more likely to recommend a horror film based on its visual elements, including the cinematic palette?

150 responses

- Yes
- No
- Maybe

10%
24%
66%

6. DISCUSSION

This study highlights the critical role of lighting in affecting the emotional and psychological tone of horror movie genre. The findings from this research suggests that the interplay of light and shadow, along with deliberate choices in contrast and color temperature, considerably heightens suspense, terror, and thrill. Participants consistently reported stronger feelings of unease and immersion when lighting was effectively utilized, underscoring its importance in visual storytelling.

The study emphasizes that high contrast and cooler tones evoke fear and isolation, while warmer colors, when compared with darkness, adds discomfort. These insights demonstrate the intentional craft behind lighting decisions, which are not just technical but crucial for amplifying narrative impact and audience engagement.

Overall, the research highlights how lighting enhances emotional depth and audience immersion in horror films, offering valuable insights for filmmakers and scholars into the craft of evoking fear through visual design.

7. CONCLUSION

Investigating the complex relationship between lighting techniques and the psychological impact they create within the horror genre is the focus of the research study "Illuminating the Cinematic Palette: A Comparative Analysis of Lighting Techniques and Their Impact on Mood in Horror Films". The results and analysis provided provide insight into the intricate ways in which cinematographers create visual environments that invoke emotions, heighten terror, and influence viewers' overall perceptions of the film.

The study clearly demonstrated that lighting has a significant impact on the atmosphere in horror films. Filmmakers can use it as an effective way to build suspense, heighten anxiety, and improve the mood of

their work. One notable element was the deliberate manipulation of lighting colors, whereby some colors were found to trigger emotional responses from the audience more effectively than others.

The study emphasized how lighting and color choice had a noticeable effect on an audience's emotional response. The participants admitted that they felt far more anxiety, suspense, and unease when the lighting was done well. This acknowledgement highlights how important lighting, and a cinematic palette are to evoking strong feelings in viewers and boosting the immersive experience of horror films.

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REFERENCES

Abdul Shakoor, H. M. (March, 2023). Visual Critical Discourse Analysis Of Animated Movie Hotel Transylvania 2. *CEMJP*, 739-749.

Addley Bromeo Bianus, R. S. (2014). Horror Effect Technique Through The Application Of 'Film Language'on Four Selected Horror Films. *International Journal of Technical Research and Applications*, 01-04.

Bonilla, N. (n.d.). Spooked During a Scary Movie: How Fear and Meta-Emotion Play a Role in Physiological and Emotional Reactions to Viewing Horror Films. 11. Retrieved from http://cs.oswego.edu/~nbonilla/CogCapstone/pic/SubDraft1.pdf

Carl Royer, B. L. (2005). *The Spectacle of Isolation in Horror Films.* Routledge.

Cherry, B. (2009). *Horror.* Routledge.

Draven, D. (2012). *Genre Filmmaking: A Visual Guide to Shots and Style for Genre Films* (1st ed.). Newyork: Routledge. doi:https://doi.org/10.4324/9780240824529

Duchaney, B. N. (2015). *The Spark of Fear: Technology, Society and the Horror Film* (illustrated, reprint ed.). McFarland. Retrieved 2015

Flückiger, B. (2017). *Color and Subjectivity in Film. In Subjectivity across Media : Interdisciplinary and Transmedial Perspectives.* London: Routledge. Retrieved from https://doi.org/10.5167/uzh-126903

Fokkinga, S. (2012). Darker shades of joy: The role of negative emotion in rich product experiences. *Design Issues: history/theory/criticism*, 15.

Fu, X. (2016). *Horror Movie Aesthetics: How Color, Time, Space and Sound Elicit Fear in an Audience.* Northeastern University.

Giovanna Fossati, T. G. (March 6, 2015). *Fantasia of Color in Early Cinema (Framing Film).* Eye Filmmuseum, Amsterdam University Press.

Hee Lin Wang, L.-F. C. (2006, june). Affective understanding in film. *IEEE Transactions on Circuits and Systems for Video Technology, 16*(6), 689 - 704. doi:10.1109/TCSVT.2006.873781

Jianchao Wang, B. L. (September 26-29, 2010). Horror movie scene recognition based on emotional perception. In I. Xplore (Ed.), *Proceedings of 2010 IEEE 17th International Conference on Image Processing*, (p. 4). Hong Kong. doi:10.1109/ICIP.2010.5651515

Keating, P. (2010). *Hollywood Lighting from the Silent Era to Film Noir.* New York: Columbia University Press.

Kimberly A. Neuendorf, G. G. (1988). Predicting Emotional Responses to Horror Films from Cue-Specific Affect. *Communication Quarterly*.

Kristen Harrison, J. C. (1999). Tales from the Screen: Enduring Fright Reactions to Scary Media. doi:10.1207/s1532785xmep0102_1

Kun Fu, T. h. (2016). A systematic literature review to identify empirical evidence on the use of computer games in business education and training.

Meirick, C. (2023). *Horror Movie Lighting: Techniques that the Masters Use.* Retrieved from https://www.scarystudies.com/horror-movie-lighting/

Michelle Park. (2018). *The Aesthetics and Psychology Behind Horror Films.* Retrieved from Digital Commons @ LIU: https://digitalcommons.liu.edu/post_honors_theses/31/

Mudassar Hussain Shah, S. K. (2016, August). EVALUATING HORRIFIC CINEMA FROM THE HYPOTHESES OF PSYCHOLOGICAL EFFECTS ON COLLEGE STUDENTS OF TWO CITIES OF PAKISTAN. *International Jouranl of advanced research (IJAR)*, 1831-1843. doi: http://dx.doi.org/10.21474/IJAR01/1398

Pan Xiao Tian, G. S. (Feb. 2019). Study on the design of game Horror character - Focused on the graft design Method of creatures. *Journal of Digital Contents Society*, 231-239.

Rauf, S., & Kanwal, E. (2020). Image Portrayal of States and Societies in Pakistani and Indian Films. *Print, Radio, TV and Film Studies*, *1*, 46-55. https://doi.org/10.71016/prtfs/vatng911

Renée, V. (2018, 10 27). *Horror Lighting 101: How to Use Uplighting in Fresh, New Ways to Scare Your Audience.* Retrieved from Nofilmschool: https://nofilmschool.com/2018/10/horror-lighting-101-how-use-uplighting-fresh-new-ways-scare-your-audience

Reyes, X. A. (2018). *Horror Film and Affect.* Routledge.

Romano, A. (November 09, 2018). *"How Suspiria Turns the Color Red into a Plot Point.".* Retrieved from https://www.vox.com/culture/2018/11/7/18056244/suspiria-red-meaning-aesthetic-luca-g

RON TAMBORINI, J. S. (1987). Predictors of Horror Film Attendance and Appeal: An Analysis of the Audience for Frightening Films. *Sage Journals*, 415-436. doi:https://doi.org/10.1177/009365087014004003

Safdar, G., & Abbasi, A. B. (2023). Examining Film as an Eminent Source of Entertainment: A Case Study of Pakistani Youth. *Print, Radio, TV and Film Studies*, *4*, 40-49. https://doi.org/10.71016/prtfs/v9q4ya13

Sauchelli, A. (2014, January). HORROR AND MOOD. *51*(1), 39-50. Retrieved from https://www.jstor.org/stable/24475369

Sawsan Mohammed, E. I. (2020, may 1). Content Analysis of Lighting and Color in the Embodiment of Fear Concept in Horror Movies: A Semiotic Approach Concept in Horror Movies: A Semiotic Approach. *Information Sciences Letters*.

Sewell, D. (2023). How lighting affects mood in film: Exploring the emotional impact of lighting techniques. *Helbak*.

Seyler, S. (2019). What Are You So Scared About?: Understanding the False Fear Response to Horror Films. *NC DOCS*.

Sinnerbrink, R. (2012, June 1). Stimmung: exploring the aesthetics of mood. *53*(2), 148–163. Retrieved from https://doi.org/10.1093/screen/hjs007

Sipos, T. M. (2010). *Horror Film Aesthetics: Creating the Visual Language of Fear.* McFarland.

Towlson, J. (2014). Subversive Horror Cinema: Countercultural Messages of Films from Frankenstein to the Present.

Tu Truong, S. V. (September 2001). Determining dramatic intensification via flashing lights in movies. *Multimedia and Expo, 2001 ICME 2001. IEEE International Conference.* doi: 10.1109/ICME.2001.1237655

Uchechukwu Chimezie Ajiwe, N. A.-U. (2023, 6 11). VISUAL INTERPRETATIONS OF MAGICAL EFFECTS. *AMA: Journal of Theatre and Cultural Studies*, 140.

Wang, Z. (2022, October). In terms of film genres, horror is a very specific one that requires some very specificlighting techniques. *BCP Social Sciences & Humanities*.

Winter, B. (2014). Horror Movies and the Cognitive Ecology of PrimaryMetaphors. *University of California, Merced*, 151–170. doi:10.1080/10926488.2014.924280