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Faraway, so Close: Perceptions of the Metaverse on the Edge of Madness

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Abstract: With the evolution of technologies, virtual reality allows us to dive into cyberspace through different devices and have immersive experiences in different contexts, which, in a simple way, we call virtual worlds or multiverse (integrating Metaverse versions). Through virtual reality, it is possible to create infinite simulated environments to immerse ourselves in. Future internet may be slightly different from what we use today. Virtual immersion situations are common (particularly in gaming), and the Metaverse has become a lived and almost real experience claiming its presence in our daily lives. To investigate possible perspectives or concepts regarding the Metaverse, virtual reality, and immersion, we considered a main research question: To what extent can a film centered on the multiverse be associated with adults' Metaverse perceptions? Considering that all participants are adults, the objectives of this study are: (1) Verify the representations of the Metaverse; (2) Verify the representations of immersion; (3) Verify the representations of the multiverse; (4) Verify the importance of a film (related to the Metaverse and the multiverse) on the representations found. This study—framed in a Ph.D. research project—analyzed the participants' answers through an online survey using two films to gather thoughts, ideas, emotions, sentiments, and reactions according to our research objectives. Some limitations were considered, such as the number of participants, number of the questionnaire questions and the knowledge or lack of the main concepts. Our results showed that a virtual world created by a movie might stimulate the perception of almost living in that supposed reality, accepting the multiverse and Metaverse not as distant concepts but as close experiences, even in an unconscious form. This finding is also a positive contribution to a discussion in progress aiming for an essential understanding of the Metaverse as a complex concept.

Keywords: Metaverse; multiverse; virtual world; immersion; gaming; big data

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1. Introduction

As we see technology evolving continuously, we engage with it in one way or another. However, for the technology to be accepted, we have to look into the virtual reality concept because it is the key factor that created the opportunity for us to dive into cyberspace [1] through different devices [2], developing immersive experiences [3].

And so, we dive into the Metaverse as a shared and immersive experience on a virtual world domain that comprises the internet, several applications and web technologies [4]. Therefore, the spatial structures, scenes and characters created by technology are important data forms [5]. The Metaverse allows users to interact with the virtual world through a data way [6]. As the Metaverse evolves, the data will grow, forming a big network that significantly pressures data processing in the digital world [6]. Ultimately, a Metaverse may be part of an even larger virtual reality, with different virtual worlds, or universes, that we may call Multiverse. Big data processing technology becomes a key element to implement into the Metaverse concept [6]. Our world adapts to the impact of the Metaverse and the big data (to explore the Metaverse perceptions).

Technology has continuously transformed our lives, creating new ways of communication and virtual realities, and the entertainment area is the main factor in our engagement with today's technologies that help transform the human vision and redefine narratives as something to dwell on instead of just observing [7], potentially identifying themselves in sci-fi novels [8] or other, being, for example, the animation area has to be understood as a creative strategy [9]. People and societies have already adopted many technological innovations that gain life through the world of fiction [10], allowing science fiction writers to forecast future developments and, therefore, the causal influence of real-life technological innovation [10]. In recent years, a large number of studies have focused on understanding the influence of fictional stories through variables such as knowledge about real-world issues [11–13], attitudes and beliefs [14–16], behavioral intentions [17], the self-concept [18,19] and the theory of the mind [20,21]. Hence, using animation and virtual visual special effects, the cinema and entertainment area allows us to immerse in alternative realities, perceiving them as if they were real. So, to what extent may a film help us understand the immersion in a Metaverse? Do films help or induct spectators to accept the Metaverse, the multiverse and virtual reality?

We may ask: To what extent can a film centered on the multiverse be associated with the perceptions of the Metaverse among adults? In this context, we aim to: (1) Verify the representations of the Metaverse; (2) Verify the representations of immersion; (3) Verify the representations of the multiverse; (4) Verify the importance of a film (related to the Metaverse and the multiverse) on the representations found.

As part of a PhD research project on the Metaverse, virtual reality, and gaming concepts, this study consisted of an online survey with Portuguese adults. The quantitative and qualitative data were analyzed using descriptive statistics and word cloud analysis. It is framed in a general introduction and a brief literature review. Afterward, we present a detailed exploration of the methodology applied to each open question. After, we present the findings, followed by a discussion and a conclusion, including suggestions for future work.

2. Background

2.1. Metaverse vs. Multiverse

Although the Metaverse concept's first appearance was through Neal Stephenson in 1992, it still has much to explore. Its lack of a consensus definition [22] shows us the volatile dependence on today's and future technology because we cannot predict their influence on our perceptions [23] and the wants [24] and needs of the people [23].

The Metaverse can be defined as a game that allows an immersive experience using virtual reality technology [22], creating a layer between us and reality [25] and providing a gamified experience [26]. The Metaverse has a top-level hierarchy of persistent virtual spaces that interpolate in real life so that social, commercial, and personal experiences can emerge through technologies [27]. It can also be defined as a 3D virtual shared world that depends on augmented and virtual reality technologies [28] that has no physical interaction limitation between people [29], allowing social, economic, and cultural activities engagement [30]. It is also seen as a post-reality universe, a multi-user environment that allows multisensory interactions [31], which shows us the mix of elements (online games, social networking, augmented reality, and virtual reality) that exist in its structure that allows the users engagement through digital technology [32], being available through different devices [2]. The Metaverse is supported by technology that enables the creation of a virtual world with significant opportunities in fields such as entertainment, social services, and the work of our lives [33].

But if the Metaverse concept consists of virtual worlds, can we also define it as a multiverse creator? Are Metaverse and multiverse concepts the same? No. The Metaverse is the precursor of a multiverse. In other words, a multiverse relies on the existence of several Metaverses at the same time but in different contexts. However, they commonly aim at realizing the fusion of digital and real worlds [34].

The multiverse term was introduced as an architecture for designing sophisticated XR experiences by Joseph Pine II and Korn in their book "Infinite Possibility: Creating Customer Value on the Digital Frontier" [35]. The multiverse consists of three pairs of variables, each with two opposite physical/digital dimensions (Space/No-Space, Time/No-Time, and Matter/No-Matter), which give rise to eight realms, each offering a different type of reality [34]. It covers the multiple ways when [Time ↔ No-Time] experiences happen, where [Space ↔ No-Space] they occur, and what [Matter ↔ No-Matter] they act on [34]. Each combination of the six variables yields a distinct realm, crossing the entire reality-virtuality continuum [34]. The multiverse comprehends multiple independent worlds that share little or no data (for example, two games with different rules, equipment, sign-in systems, and friends lists), as a technology-renowned journalist wrote [36]. It also can be defined as a collection of distinct and separate digital spaces with unique behaviors and features [37]. The key distinct factors for these concepts (Metaverse and multiverse) are definition, ecosystems, flow, properties, and entities [37].

2.2. Virtual Reality and Immersion

As mentioned, the Metaverse depends on virtual reality technology. Without it, virtual worlds and environments would not exist; therefore, because of this technology, our perceptions can be influenced by the Metaverse [24].

Ivan Sutherland first implemented this type of technology in 1968 [38]. Since then, it has invaded our daily lives, influencing us to accept some alternative realities created, bringing us a continuing experience throughout these virtual realities and worlds. But what exactly is virtual reality? Virtual reality is a recent concept that brings new means of communication [39], allowing our existence in imaginary worlds [1], accessible by different devices [2], and creating engaging digitally rendered environments brought by open-world games [40]. From a technological perspective, virtual reality is a computer-generated environment [41] that creates new backgrounds [1] that provide immersive experiences [3] achievable by different domains (virtual reality, games, and design) [42]. Virtual reality is also connected to the quality of users' perceptions [43], allowing an abstraction from their real, local space to enter a remote space to meet other users [44].

As an advanced human-computer interaction, virtual reality aims to create realistic environments [45] that allow the interactivity of the users, emerging as a new means for communication [46] that convinces the participant that his in another place [47] and allows them to experience similar things that exist on the physical world [48] with realistic environments [45]. In this way, people can perform diverse, immersive tasks [31], penetrating people's daily lives by being available anywhere and anytime [49].

Virtual reality has brought solid evidence that can bring impressive visual demonstrations, creating benefits in practical applications [50]. This evidence comes from the immersive characteristic created by technology that replaces real-world sensory information with a stimulus such as 3D visual images, spatialized sound, and force or tactile feedback [50], generating a world as if it were real, creating a sense of presence [50]. The immersive virtual reality systems are considered special and unique [50], affecting how we act, perceive reality, and understand ourselves [40].

But what does immersion mean? How is this important?

To understand what this concept means, we must start by understanding its meaning. Immersion refers to the level of sensory fidelity that virtual reality provides [50], it depends only on the system's rendering software and all the display technology [50] and is considered an objective property of a system [51]. The immersion must provide the ability to perceive through sensorimotor contingencies [52] for perception [53], supporting these natural behaviors [53], which facilitates the illusion of being there, allowing the subjective experience [40]. This may be considered a little bit mad by the common sense.

It is important to mention that this presence is the manifested feeling that the environment is real and that the user's sensations and actions are responsive to this world as opposed to the real one, the physical one [54]. It is an individual response related to the

experience of being there [50], so different users can experience different levels of presence in the same virtual reality environment [50]. This can be felt as a physical, social, and self-presence [55]. A higher level of physical presence, the more the user can make an abstraction of the environment [55]. Social presence is the psychological state of mind that allows a user to experience the virtual social actor as an actual social actor [55]. Self-presence is the psychological feeling connected with a virtual body [55]. All these presence sub-categories contribute to the sense of ownership over a virtual body [51].

The higher the immersion level, the greater the sense of presence [40]. In this way, we can understand that the immersion depends on vividness, connected to devices that allow the realism of the representation [56] through "breadth of information" (the number of sensory dimensions simultaneously present) [46], showing their determinant role of the hardware and software on the level of immersion [50]. The higher the level of immersive systems, the higher the level of immersion [53]. This can be achieved through the collaboration of multiple media [46], in which a simple keyboard and mouse [40]. The user feels immersed if he can move around the virtual space and apprehend the different points of view [57].

2.3. Big Data

In a big data era [6] analysis is the center of modern science [58]. This concept deals with formatting, storing, and analyzing large datasets [59]. These data can be generated by emails, online transactions, videos, audio, images, click streams, logs, posts, search queries, health records, social networking interactions, science data, sensors, and mobile phone applications [60,61], conveying different concepts [62]. All this information continues accumulating and being collected at an increasing rate [63]. The definition of big data refers to a collection of data that is too large to be managed with conventional software [6].

Over time big data technology has become more stable and can be used to address problems that all walks of life have never resolved [6]. Big data expect any amount and kind of data (structured, semi-structured, and unstructured) [6], transforming it to find hidden information [64]. So, its vitality can promote the convergence of several fields [6]. The big data core is characterized as a complete and massive dataset to obtain key information [65], where organizations and industries can benefit by gaining more insights and depth to solve real issues [66]. Big data allow not only the collection and management of a vast volume and different types of data but also the acquisition of meaningful value from it [67].

Big data offer the possibility to analyze different types of data, and with them comes the decision on how we can analyze it in the best way that suits our needs. Our study will focus on qualitative data analysis, which will help us with decision-making and prediction analysis, leading us to better and more accurate results and conclusions [65].

We will use text analytics, which allows us to discover new unknown information by automatically extracting information from different written resources [68]. Text analytics, also known as Intelligent Text Analysis or Text Data Mining or Knowledge-discovery in Text (KDT), is considered an extension of data mining, allowing us to find textual patterns from significant, non-structured sources by extracting non-trivial information and knowledge [68].

3. Methods

3.1. Data Gathering

For this study, we developed the questionnaire based on conclusions and findings from previous research [22,23,33] and framed it within our Ph.D. project. The previously found main concepts and dimensions helped us validate and elaborate the questionnaire-formulated questions. After the questionnaire was finalized, we used Jotform, an online form builderfrom Jotform Inc. (San Francisco, CA, USA), to create our online survey. This software was chosen because of its familiarity with the use and management. Like any other online form builder, it helps dynamize and reach the population we aim for more easily. The targeted population was Portuguese adults. The quantitative and qualitative

data gathered were analyzed using descriptive statistics (total (N) and percentages %) and word cloud analysis. The descriptive statistic was applied to help us understand the total of responses (N) and the significance of those responses through percentage (%), contributing to a better analysis and description of the sample. As for the word cloud analysis, we used the online tool World Cloud Generator, created in the RocketSource Innovation Labs (South Jordan) in USA. this software helped us to have a quick and easy data visualization, transforming our text into a word cloud presentation and analyzing the data using the frequency count from the terms and keywords presented on our big data.

The first five are related to the demographic sample questions, and the others are related to the movies we presented. For the reliability and validation of this questionnaire, we analyzed Cronbach's Alpha ($\alpha = 0.85$), a value that can vary between 0 and 1, the closer it is to one, the more significant the internal consistency between items; therefore, the stronger the connection between the questions that are a part of the questionnaire. We also confirmed that the correlation between questions is all highly statistically significant.

All the questions are described and analyzed in the next section.

Demographic questions:

(1) Gender
(2) Age
(3) Are you somehow connected to Information Technologies?
(4) Academic degree
(5) How often (approximately) do you play digital games (on mobile phones, consoles, computers, or other digital media)?

Other questions:

(6) Ready Player One movie—Do you know this movie?
(7) Ready Player One movie—Have you seen this trailer/teaser?
(8) Ready Player One movie—Have you seen this movie?
(9) Ready Player One movie—Do you want to see the trailer?
(10) Ready Player One movie—Classify how much you like this movie
(11) Ready Player One movie—Have you seen the trailer that we made available?
(12) Doctor Strange in the Multiverse of Madness—Do you know this movie?
(13) Doctor Strange in the Multiverse of Madness—Have you seen this trailer/teaser?
(14) Doctor Strange in the Multiverse of Madness—Have you seen this movie?
(15) Doctor Strange in the Multiverse of Madness—Do you want to see the trailer?
(16) Doctor Strange in the Multiverse of Madness—Classify how much you like this movie
(17) Doctor Strange in the Multiverse of Madness—Have you seen the trailer that we made available?
(18) Between the two films shown to you, please select the one you like best, or the one that seems most attractive to you (if you have not seen it yet, but you know the 'trailer').
(19) To what extent do you associate this film(s) with. . .
(20) What does this movie(s) make you think of? (Please describe in a few words the ideas or thoughts this film raises in you. . .)
(21) How does this movie(s) make you think?
(22) How does this movie(s) make you feel?
(23) Finally, in very brief words, can you describe why you consider this (these) film(s) important. . .

We used the Likert scale for the non-demographic questions (5, 10, 16, 18, 19) to gain more insights into how deeply a participant might feel about the topics presented. In this way, the statements reveal the dimension of the participant's attitude toward the issue/topic presented [69].

The films were selected according to the concepts they approach, which we considered the same that we aim for with our objectives and research question. The films selected were: Ready Player One, launched in 2018, directed and produced by Steven Spielberg, and the history was one in 2045, where Wade Watts, like the rest of humanity, prefers the virtual

reality of the OASIS game to the real world. James Halliday, the game's eccentric creator, dies and leaves his priceless fortune to the first person to discover the key to a diabolical puzzle he devised. To win, Watts must abandon virtual existence and experience love and reality, with a total audience of 453,000; Doctor Strange in the Multiverse of Madness, launched in 2022, represents the long-awaited film about Doctor Strange's journey into the unknown. In addition to receiving help from new mystical allies and others already known to the public, the character crosses the multiverse's incomprehensible and dangerous alternate realities to face a new and mysterious adversary with a total world audience of 438,000. In our questionnaire, we had questions "yes or no," with a Likert scale, and open questions to explore the concepts in the study.

3.2. Data Analysis and Results

We had a total of 106 participants, where 56 (2.8%) were Feminine, and 50 (47.2%) were Masculine (see Table 1, Figure 1).

Table 1. Demographic Question—Gender.

Gender	N	%
Feminine	56	52.8
Masculine	50	47.2

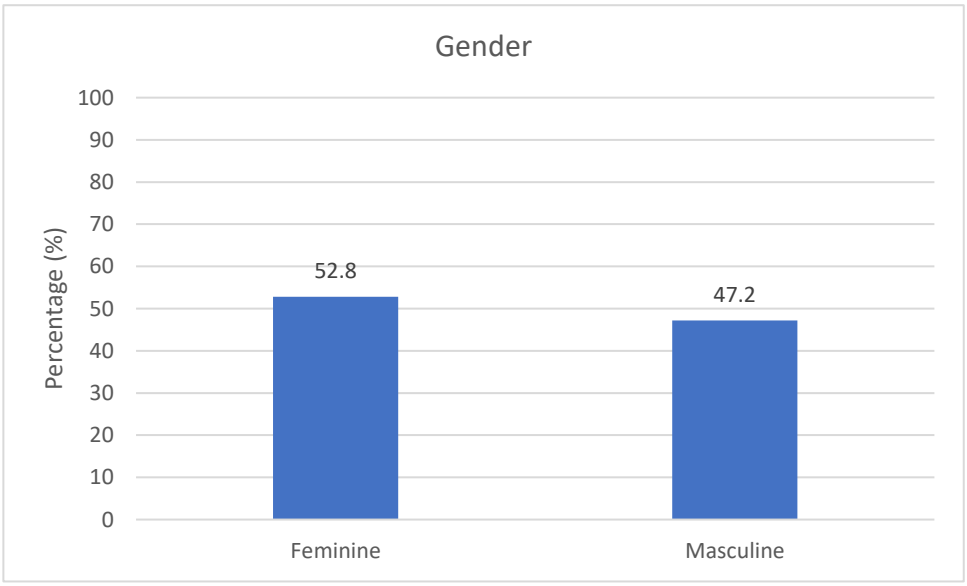

Figure 1. Demographic Question—Gender Graphic.

We observed a total of 72 (68%) participants with 40 or fewer years and 34 (32%) with more than 40 years old (see Table 2, Figure 2).

Table 2. Demographic Question—Age.

Age (Years)	N	%
≤40	72	68.0
>40	34	32.0

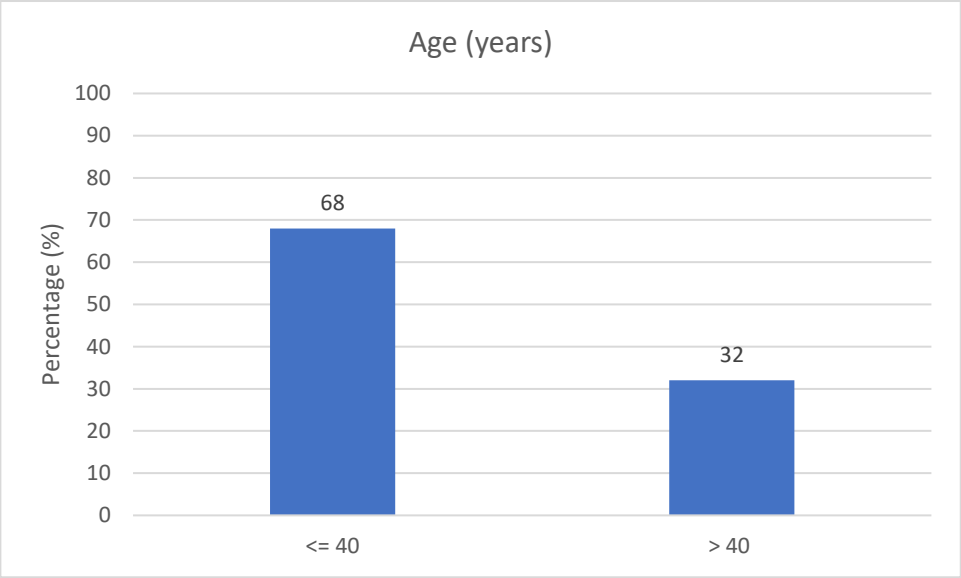

Figure 2. Demographic Question—Age Graphic.

With the question, Are you somehow connected to Information Technologies? We understood that the majority is somehow connected. The results show that 57 (52.3%) are connected through profession, 38 (34.9%) are not connected in any way, 9 (8.3%) are connected by work and studies (Working-Student), 2 (1.8%) are joined by leisure and studies, and 1 (0.9%) refers that they are bound by retirement (see Table 3, Figure 3).

Table 3. Demographic Question—Are you somehow connected to Information Technologies?

Connection to Information Technology	N	%
Student	2	1.8
Profession	57	52.3
Working-Student	9	8.3
Other (No)	38	34.5
Other (Leisure)	2	1.8
Other (Retirement)	1	0.9

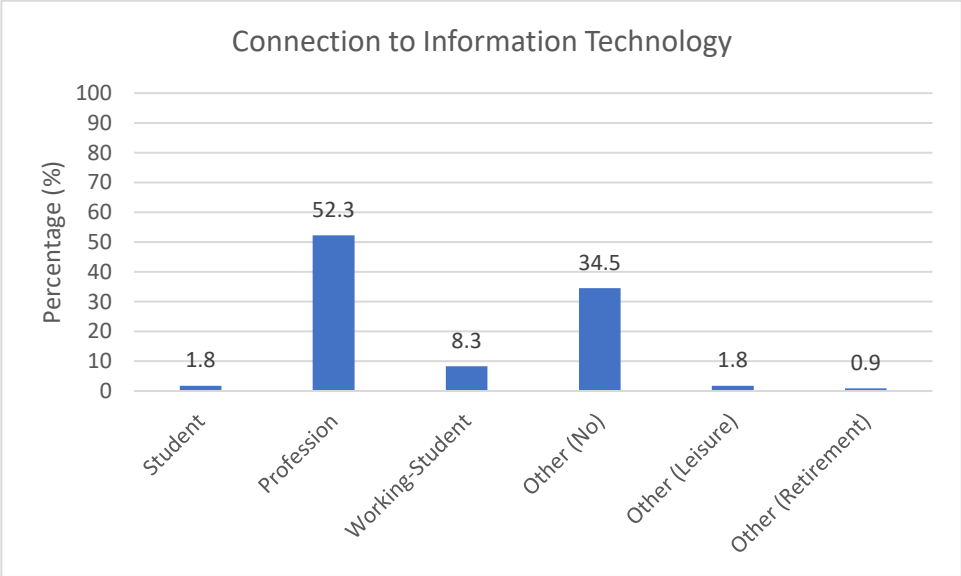

Figure 3. Demographic Question—Connection to Information Technology.

According to the participants' academic degree, the majority have a bachelor's degree (N = 54, 50.9%), followed by a master's (N = 32, 30.2%), then 12.° grade (N = 16, 15.1%) and finally a PhD (N = 4, 3.8%) (see Table 4, Figure 4).

Table 4. Demographic Question—Academic degree.

Academic Degree	N	%
1.° cycle/4.° grade	0	
2.° cycle/6.° grade	0	
3.° cycle/9.° grade	0	
12.° grade	16	15.1
Bachelor	54	50.9
Master	32	30.2
PhD	4	3.8

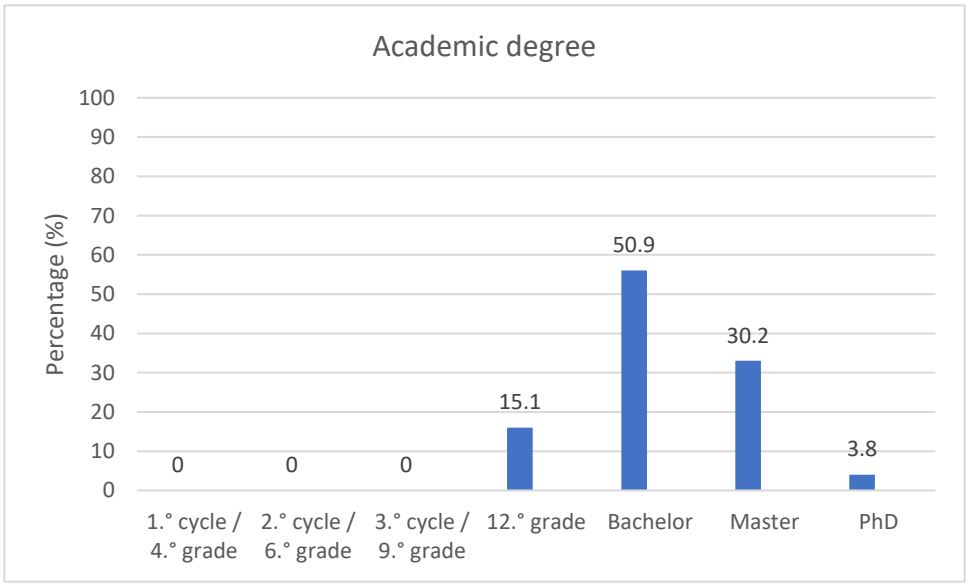

Figure 4. Demographic Question—Academic degree.

In our question, how often (approximately) do you play digital games (on mobile phones, consoles, computers, or other digital media)? (see Table 5, Figure 5), we verified that most of the participants are frequent players (or gamers) (N = 62, 58.5%).

Table 5. Demographic Question—How often (approximately) do you play digital games (on mobile phones, consoles, computers, or other digital media)?

How Often	N	%
Never	18	16.0
Rarely	27	25.5
Monthly (sometimes)	10	9.4
Weekly (frequently)	19	18.0
Daily (very frequently)	33	31.1

As for the demographic characteristics of our participants, they are very balanced between genders. The majority are less than 40 years old, are connected by the information of technology by profession, have a bachelor's academic degree, and play games daily (31.1%), weekly (18%), or monthly (9.4%), so we can consider them as gamers.

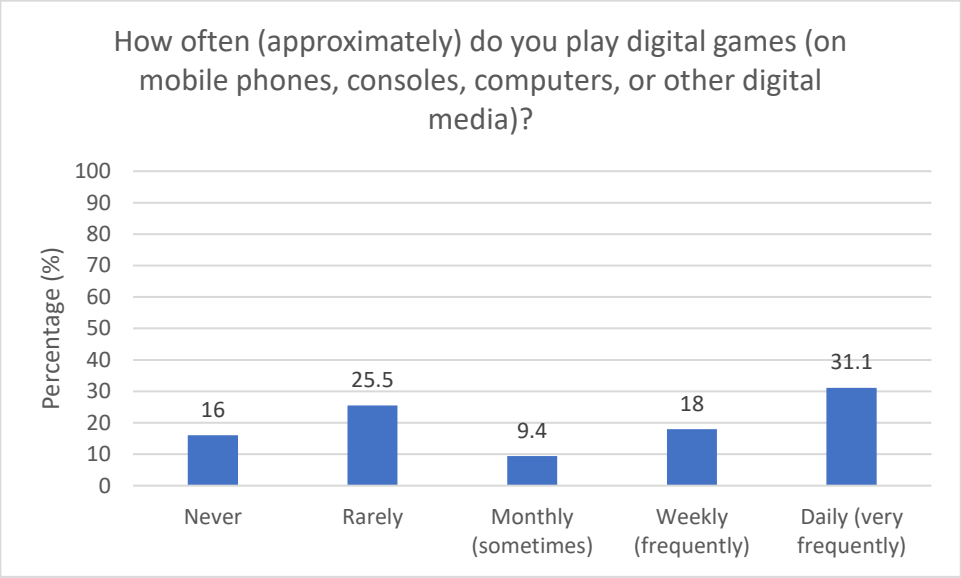

Figure 5. Demographic Question—How often (approximately) do you play digital games (on mobile phones, consoles, computers, or other digital media)?

The following 13 questions focused on the two movies we used in this study (see Tables 6–18 and Figures 6–18). The first five questions were regarding the movie "Ready Player One" (see Tables 6–11 and Figures 6–11), and the other five questions (see Tables 12–17 and Figures 12–17) were related to the movie "Doctor Strange in the Multiverse of Madness", and question 18 (see Table 18, Figure 18) was associated with both films.

Table 6. Ready Player One movie Question—Do you know this movie?

Do You Know This Movie?	N	%
Yes	43	40.6
No	63	59.4

Table 7. Ready Player One movie Question—Have you seen this trailer/teaser?

Have You Seen This Trailer/Teaser?	N	%
Yes	35	33.0
No	71	67.0

Table 8. Ready Player One movie Question—Have you seen this movie?

Have You Seen This Movie?	N	%
Yes	32	30.2
No	74	69.8

Table 9. Ready Player One movie Question—Do you want to see the trailer?

Do You Want to See the Trailer?	N	%
Yes	48	45.3
No	58	54.7

Table 10. Ready Player One movie Question—Classify how much you like this movie.

Classify How Much Did You Like This Movie	N	%
Did not like (or did not see)	50	47.1
Liked little	9	8.5
Liked reasonably	17	16.0
Liked a lot	15	14.2
Liked very much	15	14.2

Table 11. Ready Player One movie Question—Have you seen the trailer that we made available?

Have You Seen the Trailer That We Made Available?	N	%
Yes	48	45.3
No	58	54.7

Table 12. Doctor Strange in the Multiverse of Madness Question—Do you know this movie?

Do You Know This Movie?	N	%
Yes	68	64.2
No	38	35.8

Table 13. Doctor Strange in the Multiverse of Madness Question—Did you see the trailer/teaser?

Did You See the Trailer/Teaser?	N	%
Yes	53	50
No	53	50

Table 14. Doctor Strange in the Multiverse of Madness Question—Did you see this movie?

Did You See This Movie?	N	%
Yes	43	40.6
No	63	59.4

Table 15. Doctor Strange in the Multiverse of Madness Question—Do you want to see the trailer?

Do You Want to See the Trailer?	N	%
Yes	36	34.0
No	70	66.0

Table 16. Doctor Strange in the Multiverse of Madness Question—Classify how much did you like this movie.

Classify How much Did You Like this Movie	N	%
Did not like (or did not see)	46	43.4
Liked little	11	10.4
Liked reasonably	15	14.1
Liked a lot	22	20.8
Liked very much	12	11.3

Table 17. Doctor Strange in the Multiverse of Madness Question—Have you seen the trailer that we made available?

Have You Seen the Trailer That We Made Available?	N	%
Yes	39	36.8
No	67	63.2

Table 18. Between the two films shown to you, please select the one you like best Question—or the one that seems most attractive to you (if you have not seen it yet, but you know the 'trailer').

Liked/More Attractive	N	%
Ready Player One movie	32	30.2
Doctor Strange in the Multiverse of Madness	56	52.8
Both	18	17.0

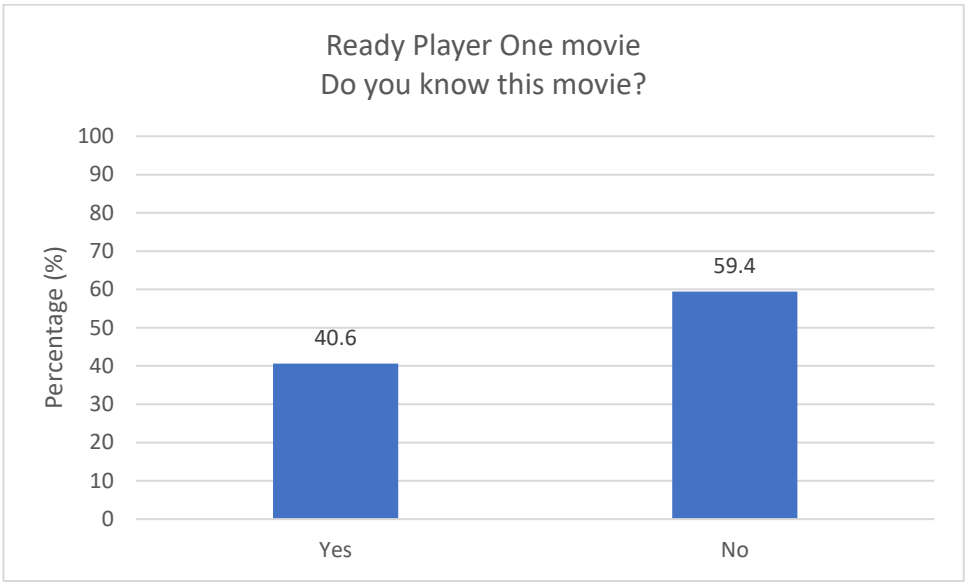

Figure 6. Ready Player One movie Question—Do you know this movie?

Figure 7. Ready Player One movie Question—Have you seen this trailer/teaser?

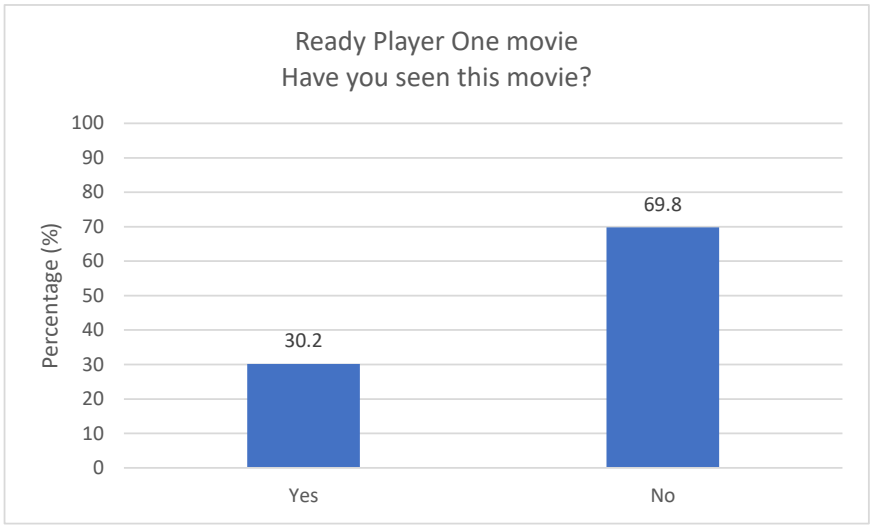

Figure 8. Ready Player One movie Question—Have you seen this movie?

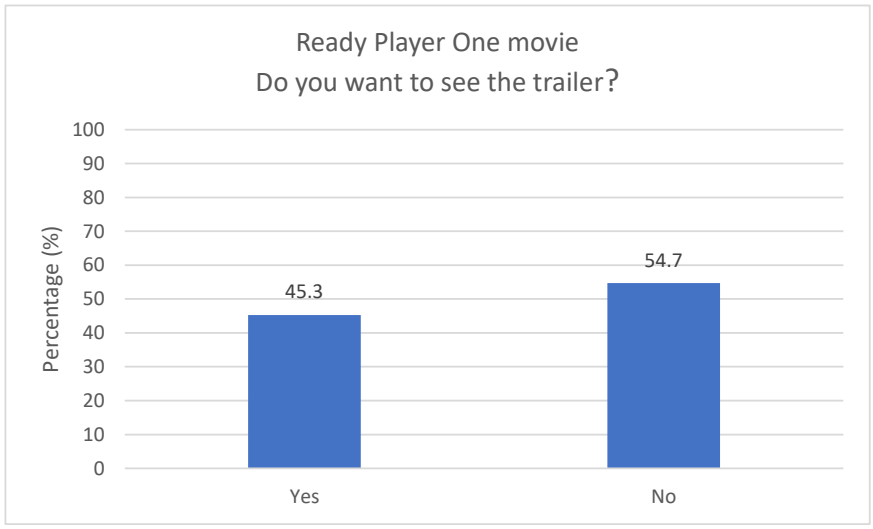

Figure 9. Ready Player One movie Question—Do you want to see the trailer?

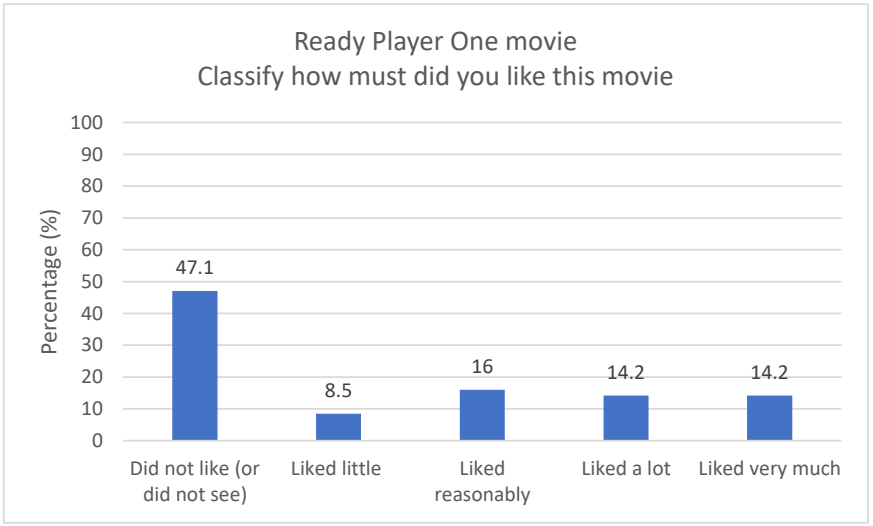

Figure 10. Ready Player One movie Question—Classify how much you like this movie.

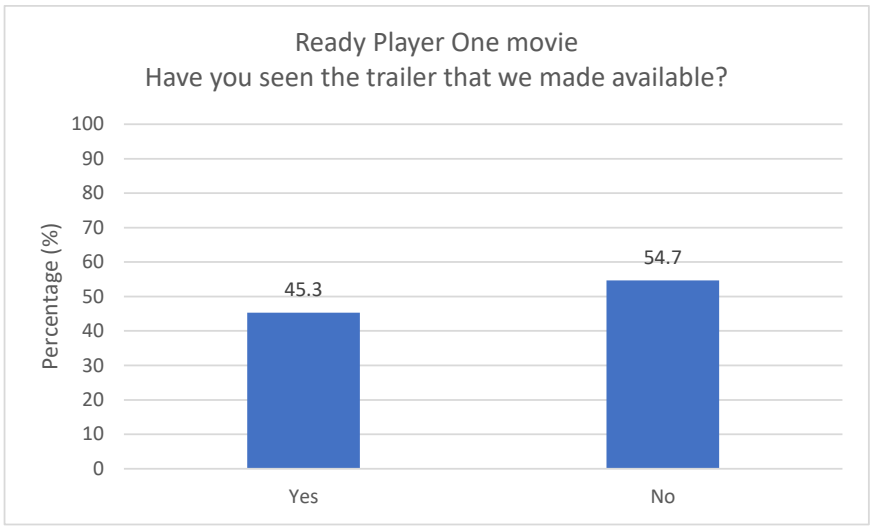

Figure 11. Ready Player One movie Question—Have you seen the trailer that we made available?

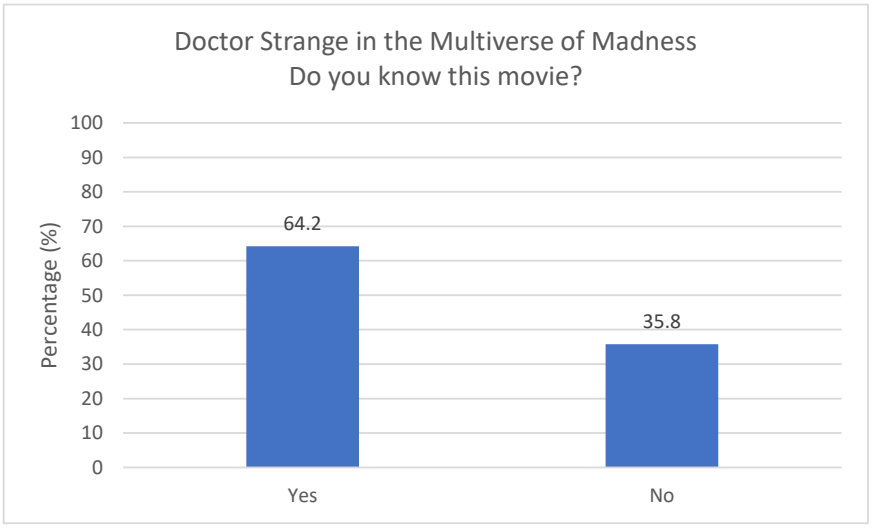

Figure 12. Doctor Strange in the Multiverse of Madness Question—Do you know this movie?

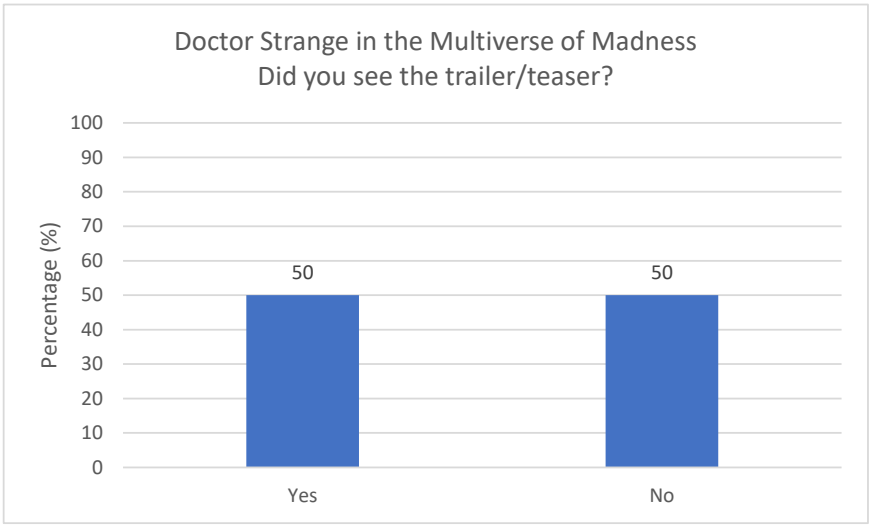

Figure 13. Doctor Strange in the Multiverse of Madness Question—Did you see the trailer/teaser?

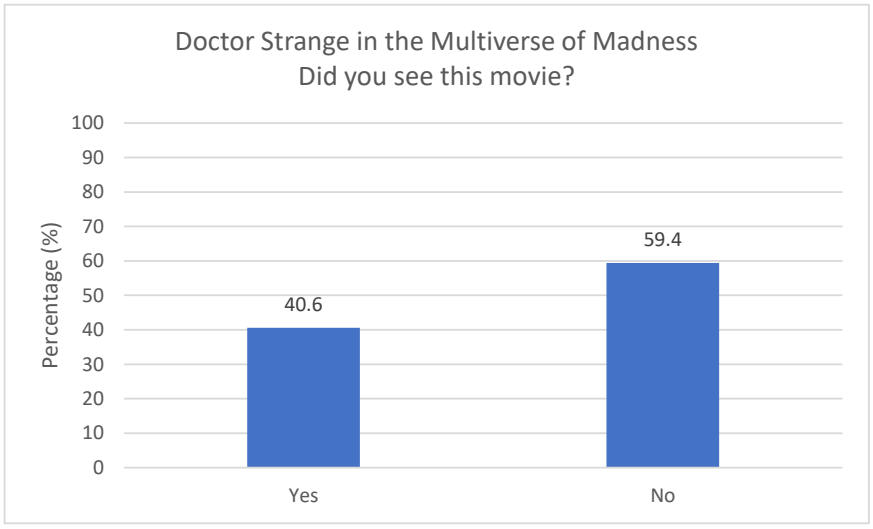

Figure 14. Doctor Strange in the Multiverse of Madness Question—Did you see this movie?

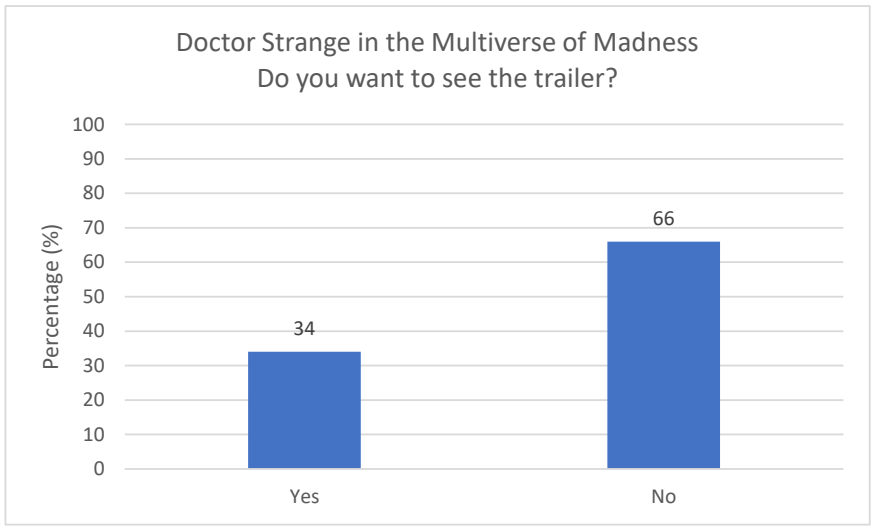

Figure 15. Doctor Strange in the Multiverse of Madness Question—Do you want to see the trailer?

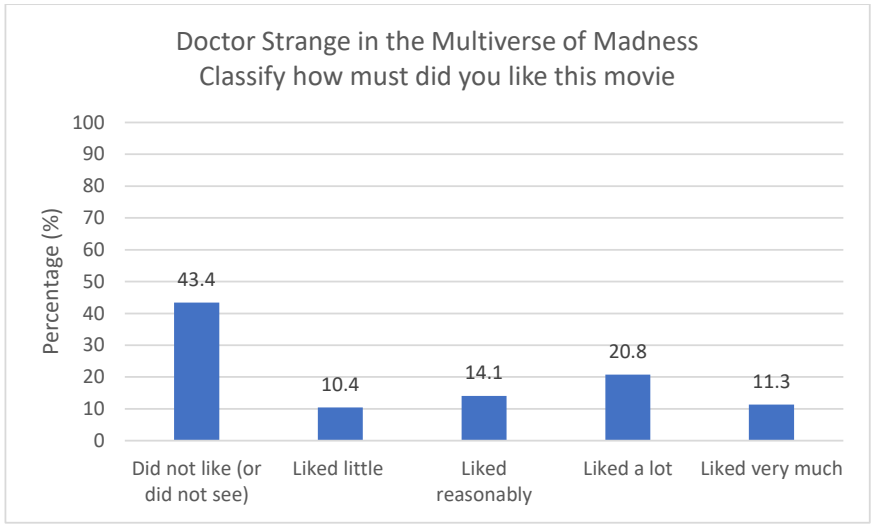

Figure 16. Doctor Strange in the Multiverse of Madness Question—Classify how much did you like this movie.

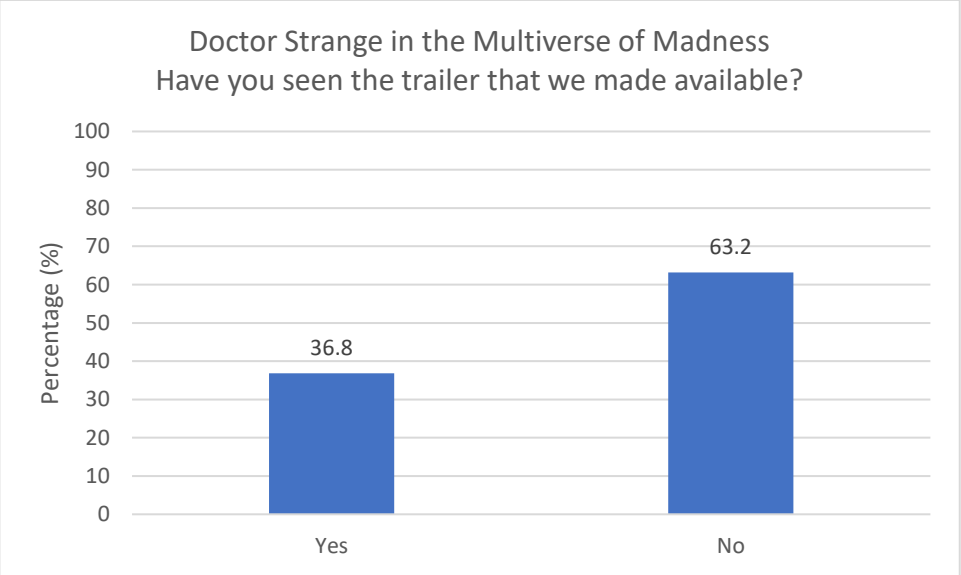

Figure 17. Doctor Strange in the Multiverse of Madness Question—Have you seen the trailer that we made available?

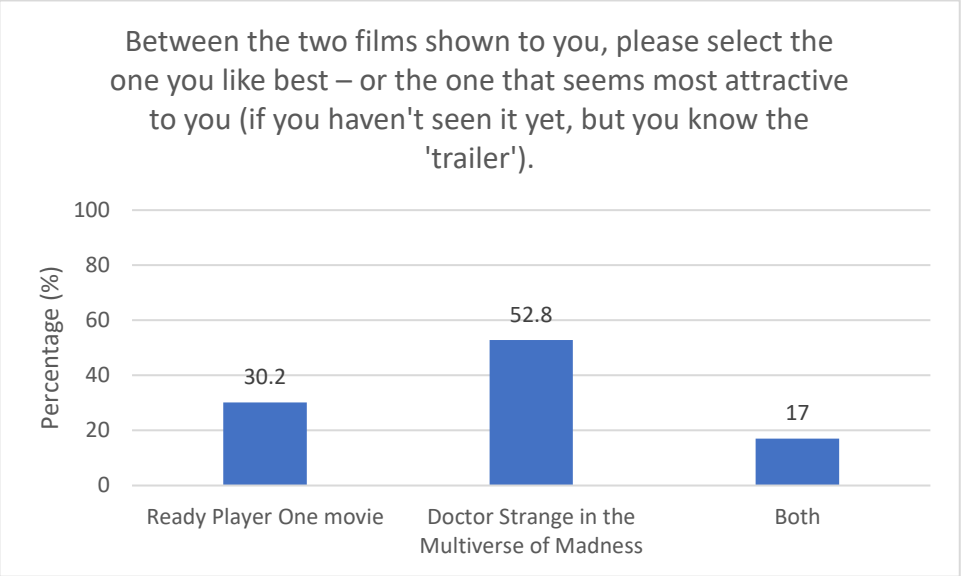

Figure 18. Between the two films shown to you, please select the one you like best Question—or the one that seems most attractive to you (if you have not seen it yet, but you know the 'trailer').

Observing questions six to nine (see Table 6–9 and Figures 6–9) regarding the Ready Player One movie, we understood that the majority did not see this movie (N = 6, 59.4%, see Table 6, Figure 6), did not see the trailer (N = 71, 67%, see Table 7, Figure 7), have not seen the movie (N = 74, 69.8%, see Table 8, Figure 8) and did not want to see the trailer (N = 68, 54.7%, see Table 9, Figure 9).

Regarding the question, how much did you like this movie (Table 10, Figure 10), the majority said they somehow liked it (N = 56, 52.8%). However, the number of participants who did not like or did not see the movie was very high (N = 50, 47.1%), of the participants who liked it (N = 17, 16.0%), they liked it reasonably.

We can conclude from the classification that perhaps because this movie was launched in 2018, it is not so present in the participant's minds, or because the history or director/producer was not so engaging or known.

If they saw the trailer for this movie we made available (see Table 11, Figure 11), we understood that the majority did not see it (N = 58, 54.7%). Compared with the previous answers regarding this movie (Table 7), we can understand that the participants did not see the trailer. Still, they did not intend to do so, even if they did not see the movie (Table 8).

So the participants show that the lack of interest or engagement in a movie affects the desire to see the trailer or movie even if they are available freely.

The questions from Tables 12–17 (Figures 12–17) are regarding Doctor Strange in the Multiverse of Madness.

Observing questions 12 to 15, we can see that the majority of the participants know the movie (N = 68, 64.2%, Table 12, Figure 12), the same number saw and did not see the trailer (N = 53, 50%, Table 13, Figure 13), the majority did not saw the movie (N = 63, 59.4%, Table 14, Figure 14) and the majority did not want to see the trailer we made available (N = 70, 66%, Table 15, Figure 15).

Regarding the classification of how much they like this movie (see Table 16, Figure 16), we can observe that the majority like the movie (N = 60, 56.6%) and that from these participants, the majority liked it a lot (N = 22, 20.8%). However, we can see that many participants did not see this movie or did not like it (N = 46, 43.4%).

This slightly different answer from the previous movie shows us that the participants better accepted this movie, perhaps because of the superhero layer present and because it is a newer movie launched.

Concerning the question, have you seen the trailer we made available (Table 17, Figure 17), we can understand that the majority also said No (N = 67, 63.2%). So, the lack of interest or engagement in a movie affects the desire to see the trailer or movie, even if they are available freely. Also, the participants who have already seen the film explain their lack of interest in seeing the trailer.

The majority chose Doctor Strange in the Multiverse of Madness (N = 74, 69.8%, Table 18, Figure 18) for which movie you liked the best or which seemed more attractive. We already mentioned that this movie was launched recently (2022), so it can be more in the minds of the participants. The themes of the two movies are similar, but the history and director/producer are different, so the engagement or enjoyment of the movie is different. It is also important to remember that this movie is part of a superhero Marvel saga, so fantasy regarding this type of movie can provide further engagement from the participants.

According to our results, we will now focus on analyzing the next question considering Doctor Strange in the Multiverse of Madness movie since this was the movie that created more discriminative meaning.

Regarding the association of this movie with the concepts presented (Table 19, Figure 19), we can verify that animation (N = 34), future (N= 40), gaming (N = 37), immersion (N = 33), virtual world (N = 34), virtual reality (N = 49), leisure or fun (N = 46), pastime (hobby) (N = 33), escape (from reality) (N = 46), and personal projection in the virtual (N = 31) is considered quite present enough (Table 19). The multiverse concept is considered very much-present (N = 39, Table 19). The Metaverse concept is perceived as present (N = 27), but we can deduce indecision from the participants on the association classification (Table 19). Figure 1, with a graphic image, gives us an easy overall view of the participants' responses regarding the Likert scale used to evaluate the association concepts towards this film (nothing, little, more or less, reasonably enough, and very much).

Doctor Strange movie relates to entertainment concepts that allow the viewers the immersion experience through virtual reality present in the virtual world and animation they present, creating and transforming the multiverse concept for the viewer's perceptions and allowing the presence of concepts related to the future, such as the Metaverse. We can verify that this movie is an excellent example of the possible perceptions of the viewers for this concept.

Table 19. Doctor Strange in the Multiverse of Madness Question—To what extent do you associate this film(s) with. . .

To What Extent Do You Associate This Film(s) with. . .	Nothing	Little	More or Less	Quite Enough	Very Much
Animation	10	22	26	**34**	14
Well-being	20	31	**32**	21	2
Future	11	9	24	**40**	22
Gaming	12	15	23	**37**	19
Immersion	12	15	29	**33**	17
Metaverse	17	8	**27**	**27**	**27**
Virtual world	11	13	15	**34**	33
Multiverse	19	3	17	28	**39**
Past	33	**39**	17	14	3
Present	15	29	**37**	22	3
Reality	26	**28**	**28**	21	3
Virtual reality	13	12	12	**49**	20
Restlessness or apprehension	24	19	**36**	23	4
Leisure or fun	4	10	28	**46**	18
Pastime (Hobby)	10	18	32	**33**	13
Escape (from reality)	10	8	21	**46**	1
Personal projection (or continuity) in the virtual	21	13	26	**31**	15

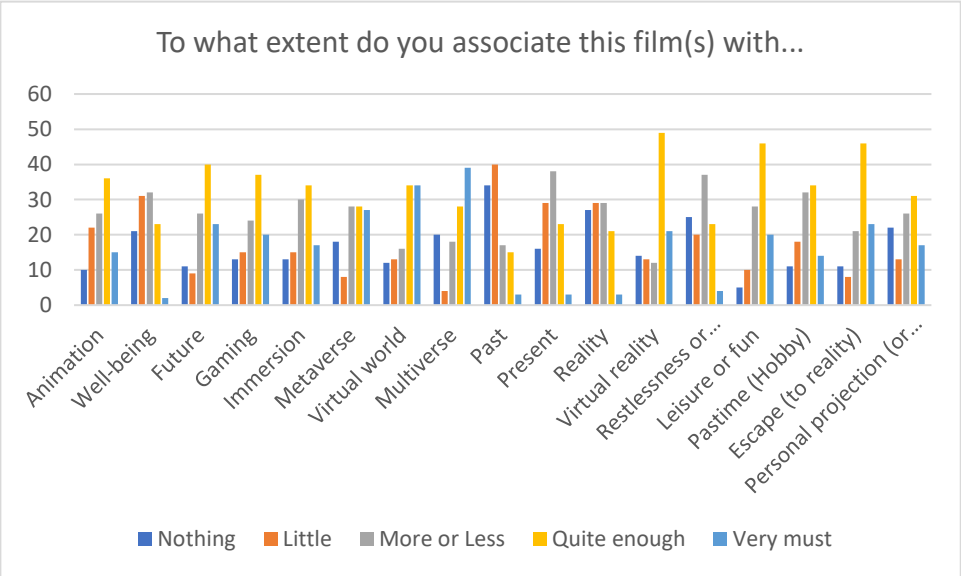

Figure 19. Doctor Strange in the Multiverse of Madness Question—To what extent do you associate this film(s) with. . .

In the following three questions (Table 20–26, Figures 20–26), we compared the participants who liked the movie with those who did not to see the different perceptions. For the descriptive information about the participants who liked the movie and those who did not like it, we can see that the majority liked it (N = 74, 69.8%, Table 20, Figure 20).

Table 20. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of? (Please describe in a few words the ideas or thoughts that this film raises in you. . .).

What Does This Movie(s) Make You Think Of? (Please Describe in a Few Words the Ideas or Thoughts That This Film Raises in You. . .)	N	%
Like the movie	74	69.8
Did not like the movie	32	30.2

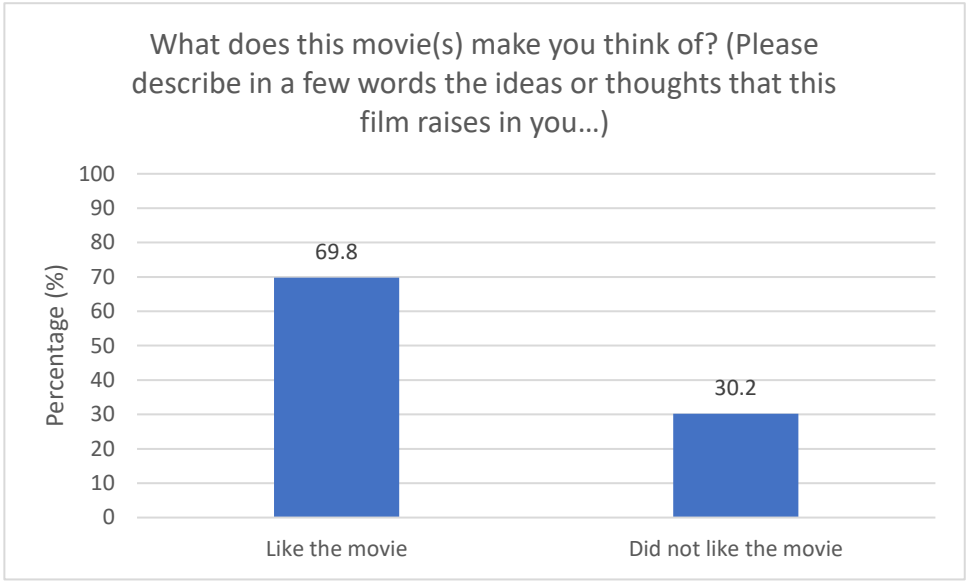

Figure 20. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of? (Please describe in a few words the ideas or thoughts that this film raises in you. . .).

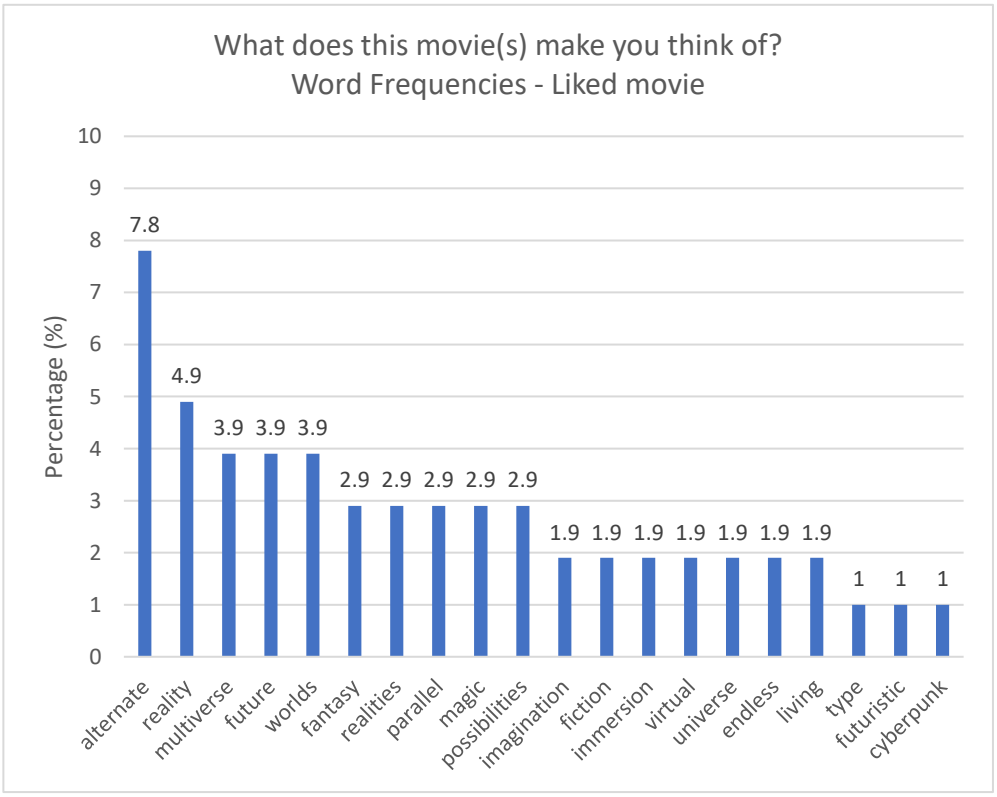

Figure 21. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of?—Word Frequencies—Liked movie.

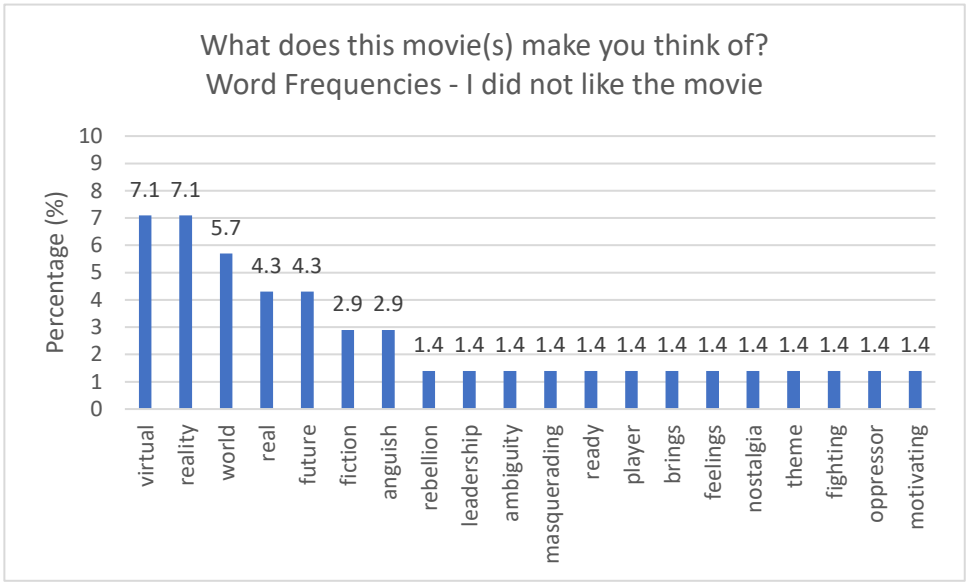

Figure 22. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of?—Word Frequencies—I did not like the movie.

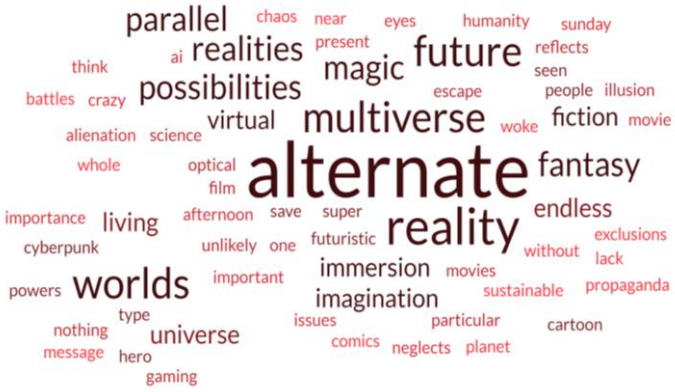

Figure 23. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of? Word Cloud-Liked the movie.

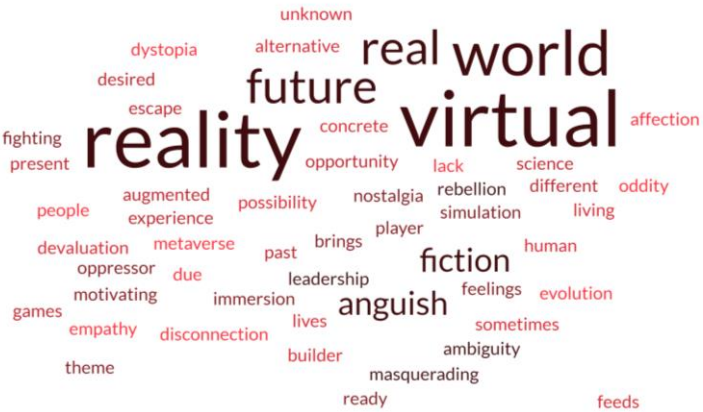

Figure 24. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of? Word Cloud-I did not like the movie.

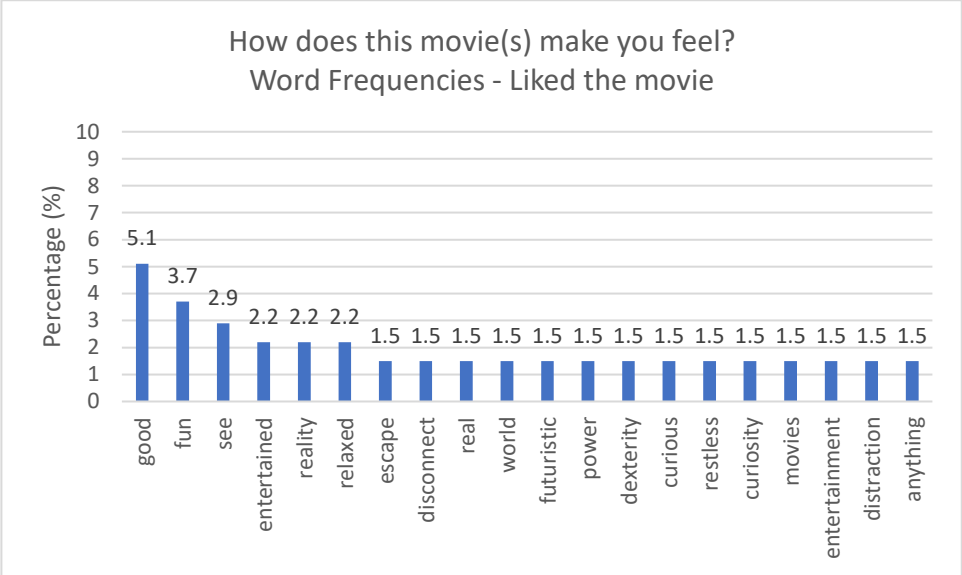

Figure 25. Doctor Strange in the Multiverse of Madness Question—How does this movie(s) make you feel? Word Frequencies—Liked the movie.

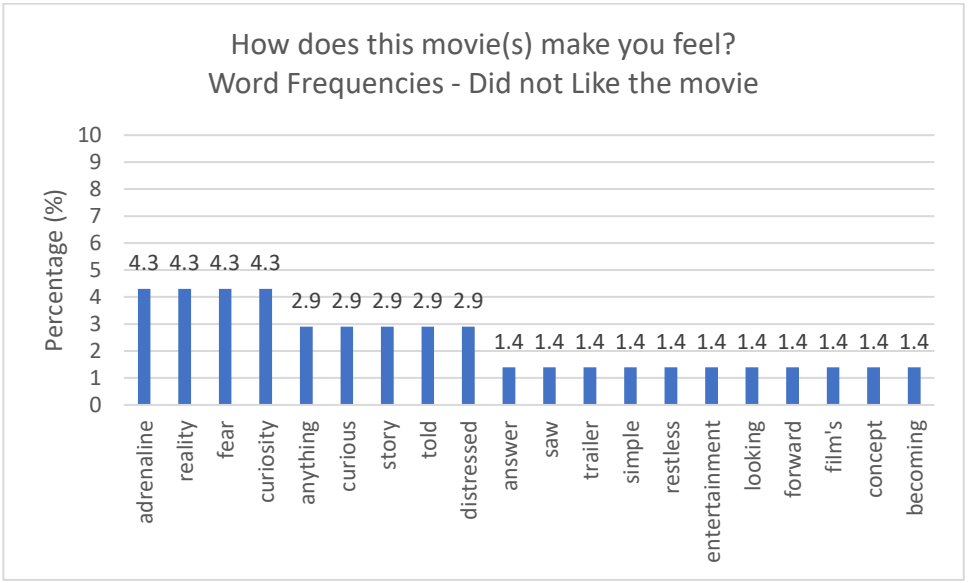

Figure 26. Doctor Strange in the Multiverse of Madness Question—How does this movie(s) make you feel? Word Frequencies—Did not Like the movie.

Regarding the question, what does this movie(s) make you think of, we can verify that the users that liked the movie (Table 21, Figures 21 and 23), thoughts were regarding the alternative realities and worlds that resemble a future vision as well as parallel worlds, supported by imagination, fantasy and magic of a fiction immersion of the virtual universe. Figure 2 gives a word cloud representative image of the word frequencies and, most importantly, mentions by the participants who liked the movie regarding the above-mentioned question.

For those who did not like the movie (Table 22, Figures 22 and 24), we can see the thoughts and perceptions of the virtual reality and world existence from a fictional future vision and a thought of anguish that this movie created. Figure 3 gives a word cloud image representing the word frequency and the most essential mentioned by the participants who did not like the movie regarding the abovementioned question.

Table 21. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of?—Word Frequencies—Liked movie.

N	Words	%
8	alternate	7.8
5	reality	4.9
4	multiverse	3.9
4	future	3.9
4	worlds	3.9
3	fantasy	2.9
3	realities	2.9
3	parallel	2.9
3	magic	2.9
3	possibilities	2.9
2	imagination	1.9
2	fiction	1.9
2	immersion	1.9
2	virtual	1.9
2	universe	1.9
2	endless	1.9
2	living	1.9
1	type	1.0
1	futuristic	1.0
1	cyberpunk	1.0

Table 22. Doctor Strange in the Multiverse of Madness Question—What does this movie(s) make you think of?—Word Frequencies—I did not like the movie.

N	Words	%
5	virtual	7.1
5	reality	7.1
4	world	5.7
3	real	4.3
3	future	4.3
2	fiction	2.9
2	anguish	2.9
1	rebellion	1.4
1	leadership	1.4
1	ambiguity	1.4
1	masquerading	1.4
1	ready	1.4
1	player	1.4
1	brings	1.4
1	feelings	1.4
1	nostalgia	1.4
1	theme	1.4
1	fighting	1.4
1	oppressor	1.4
1	motivating	1.4

Comparing the thoughts from both viewers, we can understand that the one who liked the movie engages and accepts all the concepts present in an easier way or possible transportation to reality. For the other viewers, this potential future vision is seen as something that creates anguish, probably because with the non-visualization of the film, it becomes less clear to understand these concepts because of the lack of information for not seeing it. According to research, these results show that people who see films seem to feel more personally involved with them and the topics explored by the film [70]. Otherwise, the ones who do not see the films think more rationally about what they believe is real through their reflections and knowledge of these themes [70]. The different types of immersion

is also clear between participants, more engagement, therefore, more immersion, and a higher acceptance of the concepts.

Regarding how this movie makes you feel question, from those who liked the movie, we see positive, well-being emotions, and entertainment feelings from this futuristic real world (Table 23, Figures 25 and 27). Figure 27 gives a word cloud representative image of the word frequencies and, most importantly, mentions by the participants who liked the movie regarding the above-mentioned question. For those who did not like the movie, we can see feelings that appear to be less positive emotions, such as fear and distress, but at the same time, some curiosity and adrenaline regarding this reality told by this story (Table 24, Figures 26 and 28). Figure 28 gives a word cloud image representing the word frequency and the most essential mentioned by the participants who did not like the movie regarding the abovementioned question.

Table 23. Doctor Strange in the Multiverse of Madness Question—How does this movie(s) make you feel? Word Frequencies—Liked the movie.

N	Word	%
7	good	5.1
5	fun	3.7
4	see	2.9
3	entertained	2.2
3	reality	2.2
3	relaxed	2.2
2	escape	1.5
2	disconnect	1.5
2	real	1.5
2	world	1.5
2	futuristic	1.5
2	power	1.5
2	dexterity	1.5
2	curious	1.5
2	restless	1.5
2	curiosity	1.5
2	movies	1.5
2	entertainment	1.5
2	distraction	1.5
2	anything	1.5

Figure 27. Doctor Strange in the Multiverse of Madness Question—How does this movie(s) make you feel? Word Cloud-Liked the Movie.

Table 24. Doctor Strange in the Multiverse of Madness Question—How does this movie(s) make you feel? Word Frequencies—Did not Like the movie.

N	Word	%
3	adrenaline	4.3
3	reality	4.3
3	fear	4.3
3	curiosity	4.3
2	anything	2.9
2	curious	2.9
2	story	2.9
2	told	2.9
2	distressed	2.9
1	answer	1.4
1	saw	1.4
1	trailer	1.4
1	simple	1.4
1	restless	1.4
1	entertainment	1.4
1	looking	1.4
1	forward	1.4
1	film's	1.4
1	concept	1.4
1	becoming	1.4

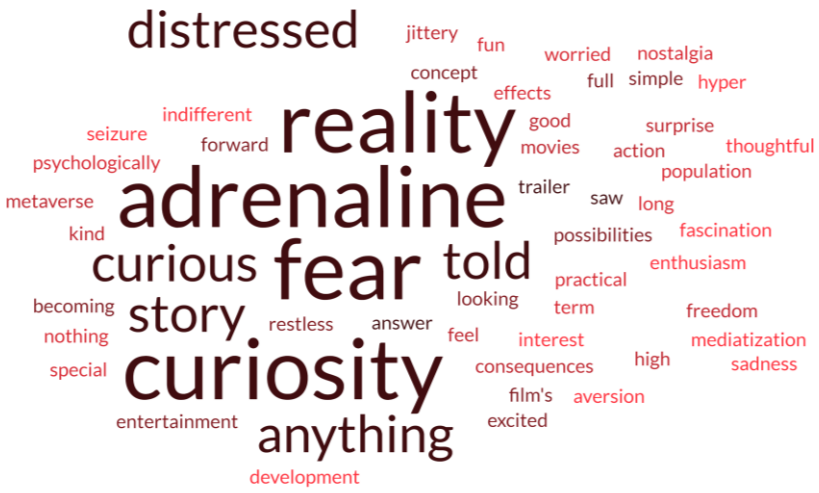

Figure 28. Doctor Strange in the Multiverse of Madness Question—How does this movie(s) make you feel? Word Cloud-Did not Like the movie.

It is interesting to observe that the participants who liked the movie have relaxed and positive feelings regarding this possible reality, perhaps because of a better understatement and engagement with the movie's reality as its own. On the other hand, the other participants, even though they have some curiosity, cannot put this a possible reality to be real, reinforcing the knowledge they have that this is a story, and by that, a piece of fiction, this is their only way to cope with the fear that all these concepts bring to them.

On the question, describe why you consider this film important, we can observe for those who like the movie that this movie is important because of a different approach from a future reality that is important to be considered in a virtual world (Table 25, Figures 29 and 30). Figure 30 gives a word cloud representative image of the word frequencies and, most importantly, mentions by the participants who liked the movie regarding the above-mentioned question. Looking at the responses of those who did not like the movie, we can see a similar idea of importance, referring to the good presentation of a future virtual reality world to be considered important (Table 26, Figures 31 and 32). Figure 32 gives a

word cloud image representing the word frequency and the most essential mentioned by the participants who did not like the movie regarding the above-mentioned question. Once again, we can see the different abilities of the immersion because the one who did like the movie referred to a possible real world and concepts. For the other ones, this reality is always put on a fantasy game, a non-real fiction reality.

Table 25. Doctor Strange in the Multiverse of Madness Question—Finally, in very brief words, can you describe why you consider this (these) film(s) important... Word Frequencies—Like the movie.

N	Words	%
14	reality	4.7
12	future	4.0
10	important	3.4
10	consider	3.4
7	world	2.4
7	different	2.4
6	think	2.0
5	film	1.7
5	virtual	1.7
4	possible	1.3
4	see	1.3
4	movies	1.3
3	viewer	1.0
3	fun	1.0
3	fiction	1.0
3	imagination	1.0
3	funny	1.0
3	good	1.0
3	escape	1.0
3	everyday	1.0

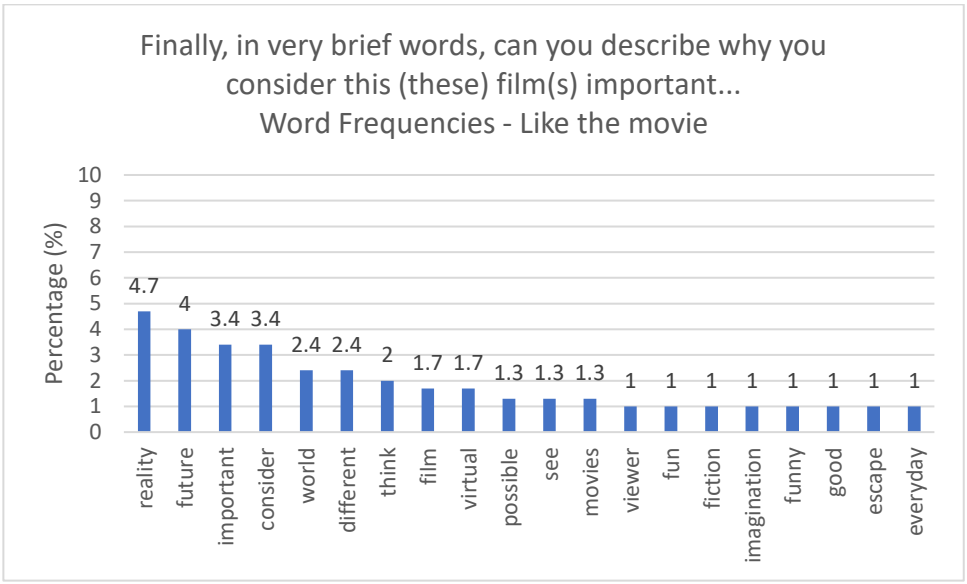

Figure 29. Doctor Strange in the Multiverse of Madness Question—Finally, in very brief words, can you describe why you consider this (these) film(s) important... Word Frequencies Graphic—Like the movie.

Figure 30. Doctor Strange in the Multiverse of Madness Question—Finally, in very brief words, can you describe why you consider this (these) film(s) important. . . Word Cloud—Liked the Movie.

Table 26. Doctor Strange in the Multiverse of Madness Question—Finally, in very brief words, can you describe why you consider this (these) film(s) important. . . Word Frequencies—Did not like the movie.

N	Words	%
6	important	4.1
5	future	3.4
4	consider	2.7
4	world	2.7
4	reality	2.7
3	virtual	2.0
3	present	2.0
3	good	2.0
2	film	1.4
2	makes	1.4
2	people	1.4
2	fantasy	1.4
2	game	1.4
2	live	1.4
2	lives	1.4
2	human	1.4
2	dystopias	1.4
2	always	1.4
2	criticise	1.4
2	analyse	1.4

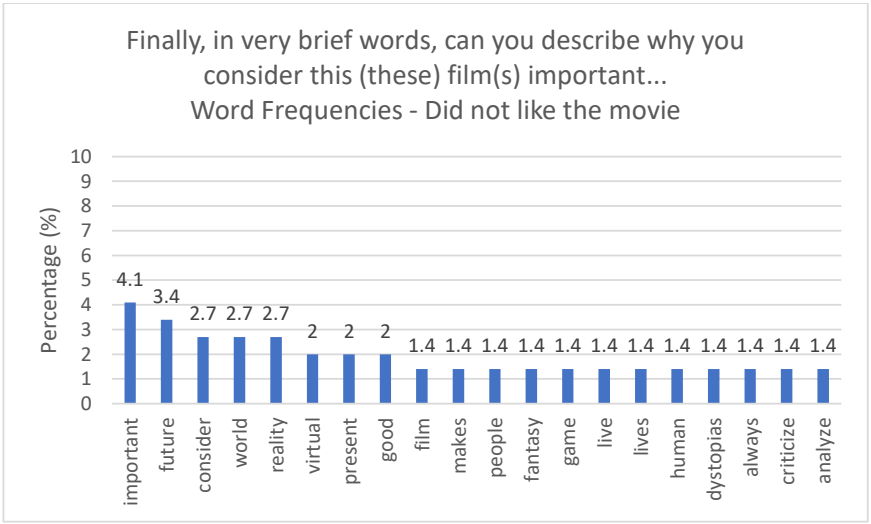

Figure 31. Doctor Strange in the Multiverse of Madness Question—Finally, in very brief words, can you describe why you consider this (these) film(s) important. . . Word Frequencies Graphic—Did not like the movie.

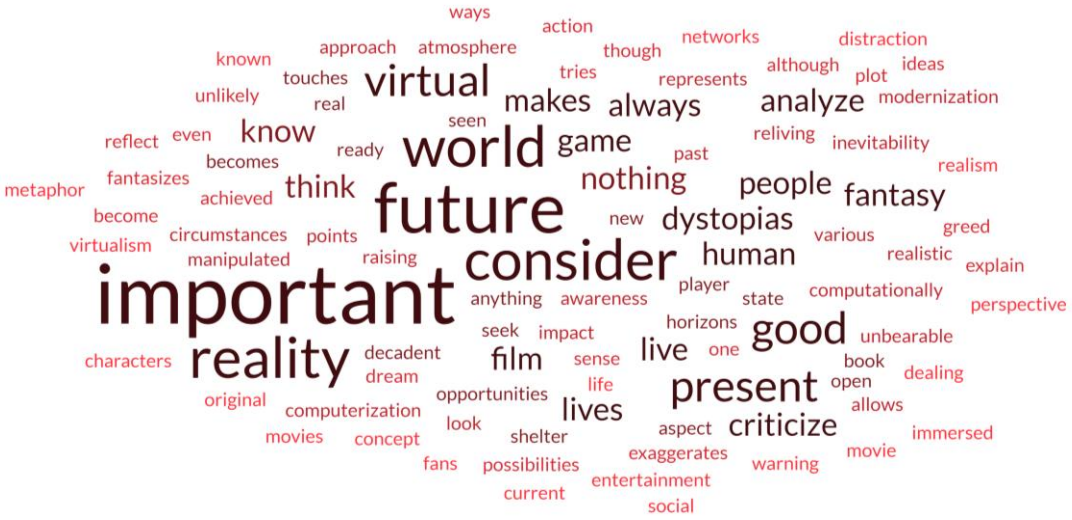

Figure 32. Doctor Strange in the Multiverse of Madness Question—Finally, in very brief words, can you describe why you consider this (these) film(s) important. . . Word Cloud—Did not like the movie.

To have a deeper understanding of the impact of this film, we decided to select 30 reviews from 30 different reviewers through the IMDB online page to compare with all the thoughts and feelings gathered from all the participants (Table 27), using a big data text analysis with a word cloud generator software.

For this analysis, we also used frequencies and word clouds to understand better the main concepts approached by participants and reviewers (Tables 28 and 29, Figures 33–36). Figures 35 and 36 give a word cloud representation through image visualization of the word frequency and the most important one mentioned by the participants and the reviewers, respectively.

Table 27. Reviewer's reviews used for the analysis.

N	Name	Url
1	Roger Ebert [Brian Tallerico]	https://www.rogerebert.com/reviews/doctor-strange-in-the-multiverse-of-madness-movie-review-2022 (accessed on 13 August 2023)
2	ReelViews [James Berardinelli]	https://www.reelviews.net/reelviews/doctor-strange-in-the-multiverse-of-madness (accessed on 13 August 2023)
3	Sight & Sound [Kim Newman]	https://www.bfi.org.uk/sight-and-sound/reviews/doctor-strange-multiverse-madness-inventive-trip-through-marvel-universe (accessed on 13 August 2023)
4	A Falk to Remember	https://afalktoremember.wordpress.com/2022/05/15/doctor-strange-in-the-multiverse-of-madness-3-5/ (accessed on 13 August 2023)
5	A Film Life [Ian Taylor, Sheila Taylor]	http://www.afilmlife.com/doctor-strange-in-the-multiverse-of-madness.html (accessed on 13 August 2023)
6	Abstract AF! [Sneha Jaiswal]	https://abstractaf.in/doctor-strange-in-the-multiverse-of-madness-is-dwarfed-by-the-witch/ (accessed on 13 August 2023)
7	After Misery [S.J.]	https://www.aftermisery.com/2022-review-round-up-2 (accessed on 13 August 2023)
8	Aisle Seat [Mike McGranaghan]	https://aisleseat.com/multiverse-of-madness.html (accessed on 13 August 2023)
9	All Ages of Geek [Mufsin Mahbub]	https://allagesofgeek.com/doctor-strange-in-the-multiverse-of-madness-review/ (accessed on 13 August 2023)
10	Always Good Movies [Filipe Freitas]	https://alwaysgoodmovies.com/reviews/doctor-strange-in-the-multiverse-of-madness-2022 (accessed on 13 August 2023)
11	An Opinion or Two [Keith Lawrence]	https://anopinionortwo.wordpress.com/2022/07/12/doctor-strange-in-the-multiverse-of-madness/2022 (accessed on 13 August 2023)
12	Analysis of a Film [Oene Kummer]	https://oenek.substack.com/p/one-dimensional-multiverse (accessed on 13 August 2023)

Table 27. *Cont.*

N	Name	Url
13	Anderson Vision [Troy Anderson]	https://andersonvision.com/doctor-strange-the-multiverse-of-madness-2022/2022 (accessed on 13 August 2023)
14	Anthony's Film Review [Anthony]	https://anthonysfilmreview.com/Film/D/Doctor_Strange_in_the_Multiverse_of_Madness.htm (accessed on 13 August 2023)
15	Any Good Films? [Simon Hooper]	https://anygoodfilms.com/doctor-strange-in-the-multiverse-of-madness-review/2022 (accessed on 13 August 2023)
16	Armchair Cinema [Jerry Dean Roberts]	https://armchaircinema.com/doctor-strange-in-the-multiverse-of-madness-2022/2022 (accessed on 13 August 2023)
17	Art House Film Wire [Jeff Mitchell]	https://www.arthousefilmwire.com/2022/05/06/doctor-strange-in-the-multiverse-of-madness-may-conjure-frustration/2022 (accessed on 13 August 2023)
18	Ashley & Company [Ashley Saunders]	https://www.withashleyandco.com/2022/05/doctor-strange-in-the-multiverse-of-madness-review-a-mcu-game-changer/2022 (accessed on 13 August 2023)
19	Ashley Manning [Ashley Manning]	https://ashleymanning.com/2022/05/06/doctor-strange-in-the-multiverse-of-madness/2022 (accessed on 13 August 2023)
20	Awards Watch [Lauren Coates]	https://awardswatch.com/review-doctor-strange-in-the-multiverse-of-madness-brings-sam-raimis-deliciously-twisted-sensibilities-to-the-mcu-elizabeth-olsen-is-films-mvp-grade-b/2022 (accessed on 13 August 2023)
21	B&S About Movies [Sam Panico]	https://bandsaboutmovies.com/2022/05/07/doctor-strange-in-the-multiverse-of-madness-2022/2022 (accessed on 13 August 2023)
22	Bad Feeling Magazine [Gabriel Sigler]	https://badfeelingmag.com/2022/05/04/doctor-strange-in-the-multiverse-of-madness-review-sam-raimis-horror-insanity-meets-the-mcu/2022 (accessed on 13 August 2023)
23	Barton Reviews [Josh Barton]	https://www.bartonreviews.com/2022/05/doctor-strange-in-multiverse-of-madness.html (accessed on 13 August 2023)
24	Basement Rejects [JP Roscoe]	http://basementrejects.com/review/doctor-strange-in-the-multiverse-of-madness-2022/2022 (accessed on 13 August 2023)
25	Battle Royale with Cheese [George Clark]	https://battleroyalewithcheese.com/2022/05/dr-strange-and-the-marvelverse-of-madness/ (accessed on 13 August 2023)
26	Battle Royale with Cheese [Matt Conway]	https://battleroyalewithcheese.com/2022/05/dr-strange-and-the-marvelverse-of-madness/ (accessed on 13 August 2023)
27	Beyond the Cinerama Dome [Tina Kakadelis]	https://tinakakadelis.com/beyond-the-cinerama-dome/2022/5/7/-doctor-strange-in-the-multiverse-of-madness-review (accessed on 13 August 2023)
28	Big Fanboy [Mark Walters]	http://bigfanboy.com/wp/?p=368932022 (accessed on 13 August 2023)
29	BloodGuts UK Horror [Martyn Wakefield]	https://www.bloodgutsuk.com/post/doctor-strange-in-the-multiverse-of-madness-review (accessed on 13 August 2023)
30	Blu-ray [Brian Orndorf]	https://www.blu-ray.com/Doctor-Strange-in-the-Multiverse-of-Madness/1173457/#Review2022 (accessed on 13 August 2023)

Table 28. Participant's vision—Feelings and thoughts—Word Frequencies.

N	Words	%
16	reality	4.2
8	future	2.1
8	good	2.1
8	virtual	2.1
8	alternate	2.1
6	world	1.6
6	fun	1.6
5	real	1.3
5	curiosity	1.3
4	escape	1.1
4	curious	1.1
4	magic	1.1
4	movies	1.1
4	see	1.1
4	anything	1.1
4	adrenaline	1.1
4	possibilities	1.1
4	multiverse	1.1
4	worlds	1.1
4	fiction	1.1

Table 29. Reviewers vision—Word Frequencies.

N	Words	%
260	strange	2.2
189	multiverse	1.6
150	doctor	1.3
143	film	1.2
120	madness	1.0
111	marvel	0.9
102	movie	0.9
90	wanda	0.8
87	raimi	0.7
83	one	0.7
74	mcu	0.6
72	character	0.6
68	america	0.6
58	horror	0.5
57	just	0.5
55	benedict	0.5
51	universe	0.4
49	even	0.4
48	olsen	0.4
48	time	0.4

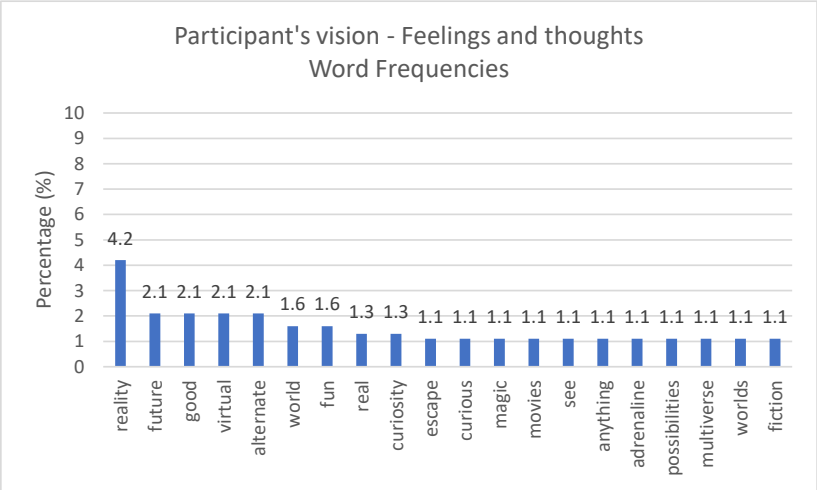

Figure 33. Participant's vision—Feelings and thoughts—Word Frequencies.

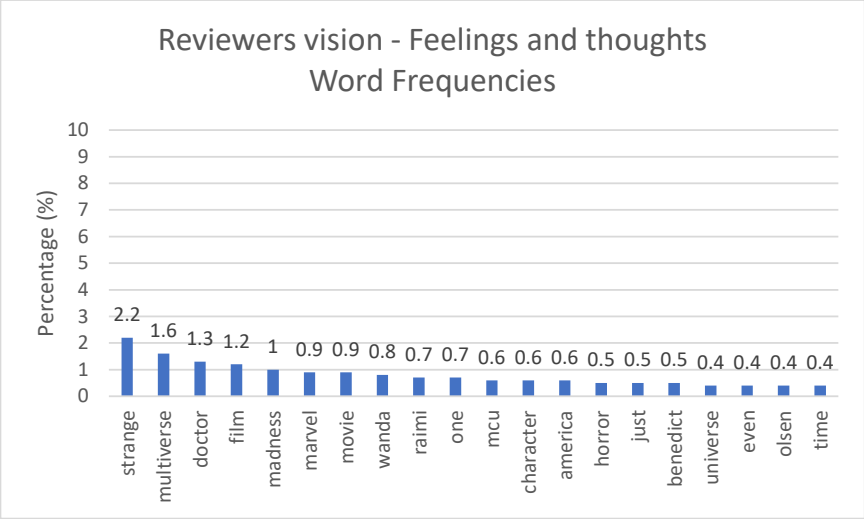

Figure 34. Reviewers vision—Feelings and thoughts—Word Frequencies.

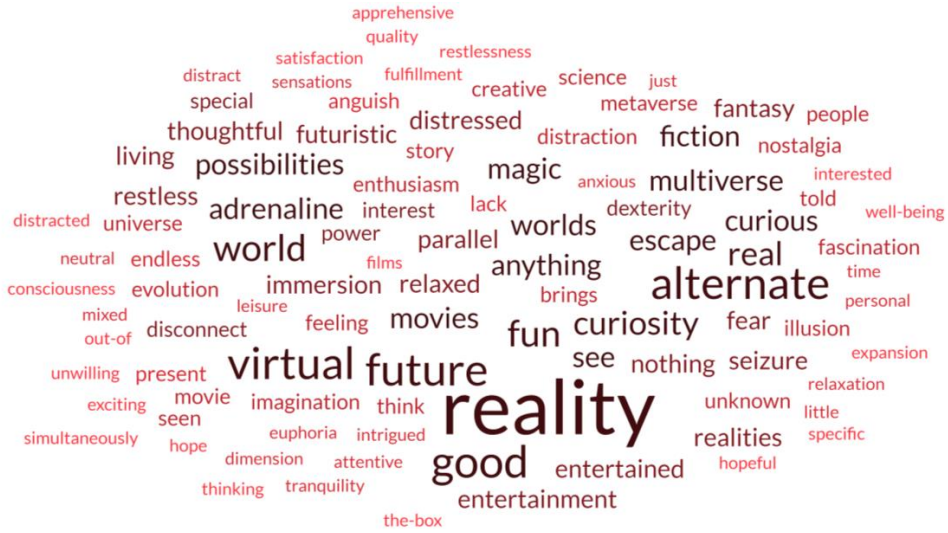

Figure 35. Participants vision—Feelings and thoughts—Word Cloud.

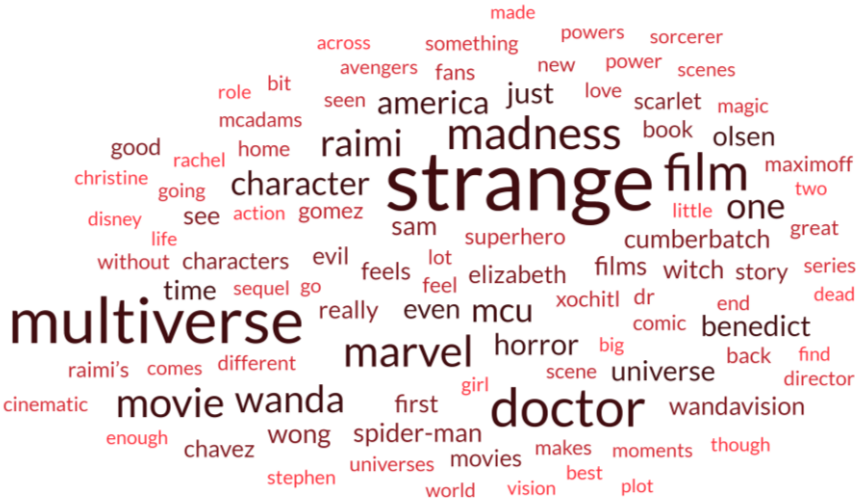

Figure 36. Reviewers vision—Feelings and thoughts—Word Cloud.

Regarding the participant's feelings and thoughts, we can see positive and entertaining emotions and an engagement with this alternative virtual reality world that can be seen as a magic and futuristic view of actual reality. This engagement can be by the immersion concepts that create a fictional world, a real possibility (Table 28, Figures 33 and 35).

Regarding the reviewer's reviews, we can see their approach to fiction creation. This creates a multiverse that can relate to a possible madness for the comprehension that engages the viewer through an immersive marvel (super-hero) universe. It also mentions the horror dimension, possibly showing the confusion or lack of knowledge regarding the proposed alternative time and universe (Table 29, Figures 34 and 36).

Comparing the two visions, participants and reviewers both engage in the alternative multiverse reality. However, the participants show a better expression of emotions and well-being entertainment feelings than the reviewers, who only approach from a fictional perspective as some madness of horror for understanding.

Nevertheless, it is very interesting to see that in some way or another, more positive or negative way, both participants and reviewers ascertain the existence of these concepts: multiverse, virtual reality, and virtual worlds.

4. Discussion

Our findings gave us important insights regarding the Metaverse, multiverse, virtual reality, and immersion and their relation, contributing to a better understanding of how the Metaverse is perceived and represented. We identified some representations of the Metaverse, immersion and the multiverse, and the influence of a film on the representations found.

Regarding our first objective, verifying the representations of the Metaverse, we identified that the Metaverse was represented directly and indirectly. The participants identified it directly as a concept present in the film (Table 19). Indirectly, we could see other concepts that are a part of the Metaverse concept that were mentioned as important, such as virtual reality, gaming, animation, and immersion. The Metaverse can be defined as an immersive game experience using virtual reality technology [23] that creates a layer between reality and us [25], allowing engagement through digital technology and creating opportunities in the entertainment area [33] through a mix of elements [32] through different devices [2]. So, there is a lack of knowledge or confusion about the Metaverse definition according to the concept's lack of definition [33].

According to our second objective, to verify the representations of the immersion, we could see that the participants considered it important and associated with the film. The immersion is related to the fiction dimension and the acceptance of the alternative reality presented. We also identified that if the film, or virtual reality presented, was more accepted or more engaging, the immersion was higher because the more you immerse in that new reality, the more you accept the reality showed. The immersion concept facilitates the illusion effect of being there [40], allowing our ability to perceive through sensorimotor contingencies [52]. The higher the immersion level, the higher the sense of presence [40] in that reality.

It was clear that the participants felt immersed in the film reality because the immersion level can be achieved through the collaboration of multiple media [46]. According to a previous study, these results also concluded that the participants who allowed themselves to be engaged/immersed in animation movies managed to connect emotionally and in a positive, meaningful way [70]. Animation, in any form (in this case, a movie), is essential in the lives of young adults, even if lived unconsciousness [71], because it offers a link between us and the virtual and social worlds, offering new perspectives about our reality and way of thinking through virtual reality [72], creating a virtual world sharing visions with others allowing the creation of unique environments and experiences for those who permit this influence in their lives [70]

Looking at our third objective, verifying the representations of the multiverse, we observed that this concept was associated with the idea of alternative realities or worlds. Although there is a sense of mixed concepts between the Metaverse and the multiverse, the participants could see the idea of a fusion between the digital and the real-world [34]. Still, it was unclear that they understood the multiverse as virtual worlds that do not share data or little data [36], considered distinct and separate digital spaces [37].

Regarding our fourth objective, to verify the importance of a film (related to the metaverse and the multiverse) on the representations found, we noticed that a movie is an extraordinary means of entertainment communication that allows the acceptance of different concepts through their story and virtual reality created. The world of fiction gains life through technological innovations [10], enabling possible forecasting of future development [10]. According to many studies that understand the influence of fictional stories on attitudes and beliefs [14–16], our results also give us the perception that virtual reality and fiction represent an ability to transcend the boundaries of human perception [56]. Virtual reality allows users to penetrate inaccessible places, as fiction legitimates this representation [56]. This creates an immersive narration that reports real events likely to produce a feeling of being in the scene [56]. The virtual reality systems allow the readers, or viewers, the sense of immersion and empathy called the depth of information [56], the special life-likeness in cinematic fiction depends on what the writers or readers know least in life [73], allowing the illusion new ideas to emerge. It's also important to note that most

of our participants are gamers (Table 5), which allows a better engagement with this movie and the association of these concepts.

This study has brought new insights regarding how the Metaverse has been seen through the entertainment area (through films), giving further and more information concerning what a user expects or can absorb from these new concepts. In this way, the contributions provide a significant understanding of the relationship between these concepts. The user is the primary key to a prosperous entertainment area, and the Metaverse depends on the entertainment area to evolve.

Our findings helped us understand that the Metaverse concept is still in development and the importance of the entertainment area in our study of a cinematographic movie to allow these new concepts to emerge and be accepted. We can understand how the Metaverse can be used as an essential gamified learning tool in entertainment. It has already been studied as a vital concept that potentialises learning skills as an innovative technology [74].

For future research, we consider it essential to continue exploring these concepts, their relations, and definitions using other possible methodologies, such as different qualitative and qualitative analyses. It could also be important to explore other mediums of entertainment, such as novels, series, or theatre, as well as gaming experiences with virtual reality experiences, to understand better those related to the research concepts. It could be considered the development of other case studies with different types, such as gamer/not gamer, female/male, or age difference.

5. Research Limitations

The number of participants for this study, a higher and broader sample, would be more representative and give us more information. However, this sample is considered a significant sample. The knowledge or lack of knowledge of the movies presented, and perhaps other movies, could have different responses, allowing other results. Another limitation could be the large or few questions in the questionnaire, depending on the perspective taken. Many questions can provoke a simple or non-answer by the participants. Still, fewer questions will not help us to achieve our objectives. Nevertheless, we used the Likert scale and yes or no questions to help participants express themselves better.

6. Conclusions

Technological evolution amazes us daily with all its possibilities in creating a livable world, whether being a co-helper for everyday tasks or entertainment. This evolution is a dream-maker possibility because humans are curious to learn and create new things. But where do these dreams come from?

Focusing on our research question: To what extent can a film centered on the multiverse be associated with adults' Metaverse perceptions? The answer is clear: a movie has that communication power that allows us to dream of new things and take down the barriers between what can be or cannot be real. The movie exposes the Metaverse, the multiverse, and the very state of immersion that it provides, and it is as if it were giving a practical lesson to the viewer. The film's character is immersed in the Metaverse, and the spectator is immersed in the movie. By identifying with the character, he is also immersed in the 'virtual reality' experiences. Therefore, the spectator is multiply immersed when watching the film, living in the multiverse of the Metaverse. The power of the role of a movie, and in this case, a film with animation and special effects, has shown the potential to explain or make a real virtual world through technological development, virtual reality. Virtual reality is considered a dream field [75] because it can transform our perspective of assumed reality.

It was visible that all the participants had ideas, even if they did not have a clear definition in mind, of the presence of all these Metaverse, multiverse, virtual reality, and immersion concepts present in the movie. However, it was even more evident that all these concepts were connected because the participants who liked the film felt more immersed.

Therefore, the acceptance of that virtual reality world created by the movie allowed them to feel in that reality, with a sense of presence, accepting that the multiverse and Metaverse concept already exist in their reality, even in an unconscious form.

It was also essential to understand the importance of big data as an important bridge of the Metaverse and all the data it will generate through the interactions that users will have with the virtual worlds. We observed these interactions through a movie or entertainment area, which allowed us to gain insights into these concepts from the participants and reviewers.

With our study, it was possible to understand the development of the Metaverse concept, the importance of the entertainment area, the relation between the Metaverse concept and the entertainment area through the cinematographic area, and the importance of the big data regarding the Metaverse concept, through this population that enjoys this type of movies. These findings will give researchers more leads regarding this concept and their relations. These leads can transform and influence how the practitioners use the terms studied to adequately address new findings or needs and help the entertainment area focus on the users' needs and understanding level.

Looking at the power of films as an entertainment area, the story of these concepts (Metaverse, multiverse, virtual reality, and immersion) was introduced as a dream, and if we

"Have faith in your dreams and someday
Your rainbow will come smiling through
No matter how your heart is grieving
If you keep on believing
The dream that you wish will come true." [76]

The cinematographic area has already shown that it is an amazing way to stimulate dreams and make dreams come (almost) true. The Metaverse is closer to us than we could think. Who knows if one day it will become more difficult to distinguish between what we assume as real and what is a product of our imagination or digital projection, confusing our perception on the edge of madness or wonder. The Metaverse is still developing, but we will someday, as long as we are involved, see it as a dream come true.

Author Contributions: Conceptualisation, M.C. and A.O.; methodology, M.C. and A.O.; validation, A.O. and A.P.; investigation M.C.; resources, M.C.; data curation, M.C.; writing—original draft preparation, M.C. and A.O.; writing—review and editing, M.C. and A.O. and supervision A.O and A.P. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: This study follows the guidelines from the ethics committee for this type of study. The intention was not to analyze or measure behaviors but to verify and interpret the users' perceptions, i.e., their opinions on their feelings or thoughts about the films and concepts presented. Our participants were adults, were informed, and freely agreed to the terms presented, and their consent was obtained. For these reasons, there was no need to consult an ethical committee.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. It is essential to note that before answering the questionnaire, all the participants were well in-formed, on a protocol page that they could carefully read, about the study's primary objective, the University research reference, and that their participation was voluntary and confidential. Each participant was also informed as to how long it would take to fill out the whole questionnaire, and that could choose not to answer–or not proceed to the questions–or quit at any time. Additionally, they were informed about email references for any inquiry about the questionnaire or the research. Afterward, at the bottom of the page, the participants needed to respond (Yes/No) if they had read and understood the information previously described and if they agreed to participate in this study and answer the following questions. Once again, it was mentioned that all the answers were anonymous and confidential and that they could withdraw at any time. If the participants answered yes, registering their consent and free will, they had access to the questionnaire and participated in the study. If not, they will not have access to the questionnaire and were thanked for the time they spent.

Data Availability Statement: Data are contained within the article.

Conflicts of Interest: The authors declare no conflict of interest.

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