

Article

Cinema as a Transmitter of Content: Perceptions of Future Spanish Teachers for Motivating Learning

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Abstract: In recent decades, the diverse changes produced have accelerated the relationships regulated by media. Cinema was able to bring together moving image and sound for the first time, and as a result of its audiovisual nature, it is a particularly suitable resource for motivation in education. In this light, the teacher's perception for its application in its initial formal stage is highly relevant. The main objective of our research, therefore, has been to analyze the perceptions of cinema as a didactic resource for the transmission of content in preschool and primary education by students who are studying to become teachers themselves. The sample was composed of 4659 students from Spanish universities, both public and private. In addition to this, the PECID questionnaire was elaborated ad hoc and a comparative ex post facto design was adopted. The result showed that over 87% of students recognized the diverse educational potentialities of cinema, with motivation being an important factor. Furthermore, significant differences were found in perceptions according to different factors such as the type of teacher training degree, the Autonomous Community in which the student studied, as well as film consumption habits. On the basis of these results, future application of cinema needs to be applied using the different potentialities detected in our study.

Keywords: cinema; mass media; learning motivation; higher education; didactic; professional development

1. Introduction

The changes that have taken place in recent decades have accelerated relations based on and regulated by media. To these changes, the prevalence of the audiovisual should be added. In this sense, Ref. [1] indicated that the media influenced all areas, including the family, which was affected by the use of media on a daily basis, especially by minors. This reality has caused various authors to promote media education at schools [2–5], because despite the prevalence of screens in everyday life, school, as noted by [6], is somewhat unsynchronized with the world around it. This has caused authors such as [7] to state that with each day that passes without audiovisual culture being taught in schools, media illiteracy, catalogued as the illiteracy of our times, increases.

Among the different forms of media there is cinema, which is the ability to combine moving images with sounds, a technology which has now existed for more than one hundred years. This media has its own entity, as indicated by [8], which is a form of artistic expression different from other media such as television. Cinema has an agglutinating language, because, as [9] indicated, it combined its own iconographic aspects and narrative figures inherited from literature and other media. Different meanings for cinema have been established by [10] such as a vehicle to construct the past, as a factory of dreams, and as an expression of the art of storytelling. In this regard, Ref. [11] emphasized the nature of cinema for the construction and preservation of identities, conceived as representations and categorizations of the world.

From an educational perspective, the educational possibilities of cinema have not gone unnoticed, for instance, Ref. [7] called cinema an invention of the 19th century to educate in the present. Cinema, due to its multiple nature of art, technology, and media, can take on different roles in the classroom, depending on the types of learning that are to be developed. In this sense, Ref. [12] distinguished between educating with cinema and educating in cinema, in other words, cinema as a teaching tool or as a creative process. Furthermore, Ref. [13] characterized cinema as a compendium of the elements of communication which could be used both as a didactic resource and as an educational foundation for conducting research, as well as being methodologically key to new curricular designs. The use of cinema in classrooms is determined by the timetables and resources available. In this sense, authors, such as [14,15], explained that it was appropriate to take advantage of the flexibility provided by digital cinema and adapt films to the time available and the educational objectives to be met. From this perspective, it is possible to use whole films, fragments of films, or short films and stop the film, advance the film or go back depending on the activity being carried out. In any case, a film should be used, discarding the use of other audiovisual works.

With respect to considering cinema as an educational resource for the transmission of content, many strengths have been identified. For example, Ref. [16] pointed out that cinema was a motivating instrument of knowledge, a vehicle for the transmission of aesthetic and social contents, establishing itself as a first-rate educational tool. In this sense, Ref. [17] maintained that cinema was a window to the world to access historical periods, philosophies and thoughts, ways of life, and customs. In [18], the author showed the capacity of cinema to reflect the vision of social and cultural reality. In addition, Ref. [19] highlighted the power of cinema to spread values and beliefs in a direct way. In [20], the authors pointed out that cinema was a powerful instrument for promoting humanizing values from a cross-cutting and interdisciplinary perspective. In addition to this, Ref. [21] added the capacity of cinema to promote intercultural sensitivity in students and to address conflicts. Another of the educational possibilities detected in cinema is its communicative potential and its capacity to capture the interest of the spectator, which allows for training and informing in a relaxed way [22]. This strength of cinema to reach students means that it can generate significant and experiential learning [23,24]. As a result, Ref. [25] emphasized the emotional density of cinema, which is the basis of the great potential of films to promote changes in people. According to this author, the capacity of cinema to connect with the emotions makes it reach the deepest part of people, being able to generate in the student's cognitive processes that cannot be generated with other didactic resources.

Following the potential of cinema as a resource for transmitting content, Ref. [26] stated that cinema in education was a vehicle for personal and social transformation, because by questioning the subjectivity of students it could provoke personal experiences and stimulate positive attitudes. To this end, cinematographic stories must be analyzed based on the students' experiences. In [27], through films, the author found that students' positive characteristics and behaviors can be developed. In addition, Ref. [28] indicated that films could generate more integrated learning, and therefore students were better able to relate the concepts. Furthermore, the capacity of cinema to generate learning that connects different areas and disciplines of knowledge has been demonstrated by [29]. The suitability of cinema to develop in students a greater understanding and appreciation of the concepts worked on was confirmed by [30]. In the same way, Ref. [31] explained that cinema could reproduce audiovisual content that enabled students to visualize it clearly and learn better. Cinema has been identified as a suitable teaching resource for generating constructivist learning [32] and for making the student the main element of education [33,34]. Moreover, the possibility of applying cinema to work on the emotions and personal development of students, because, with the structures of association and transference, the spectator experiences the emotional content through the actors or transfers his or her feelings and conflicts towards these characters, facilitating the commitment to change [35].

One of the most relevant moments for developing teachers is the initial training stage, as a key period for the correct exercise of teaching. Furthermore, it is one of the critical points of the educational

systems [36]. In this sense, it is worthwhile asking what educational vision future teachers have of a resource such as cinema. There are no previous studies that have analyzed the perceptions of students in a Teacher Training Degree program about the didactic possibilities of cinema as a transmitter of content. In addition to this, there is no research about how different variables can influence students' perceptions. However, in the perception of a resource, it is essential to have knowledge of the resource [37]. In this sense, cinema is a means of mass communication, it is present in everyday life, and future students have been able to experience it. Therefore, the contact that students have in their cinematographic consumption supposes a way of knowing cinema with projections in different areas. This path of knowledge through our leisure activities implies an aspect of informal education [38]. Likewise, it is worthwhile asking about the influence of the formal training environments of future teachers on the perceptions of cinema as a didactic resource. In this regard, these environments are the most specific way to access the knowledge of the educational possibilities of cinema, based on the training future teachers receive and the type of University they attend. In the same way, it is appropriate to keep in mind the educational stage for which the students are being trained as a variable that can mark the perceptions about the educational possibilities of cinema. As pointed out by [39], the attention paid to cinema varies with age and influences the generation of mental images, because it is the gateway to the understanding of messages. Therefore, the evolutionary stage of children marks a difference in the training curriculum for future teachers according to the different ages of children in preschool and primary education. Finally, it is also appropriate to consider the variable, Autonomous Community, because the region and the different political competences can influence personal characteristics and training environments.

On the basis of the above, the general objective of this study is to examine the perceptions of students in a Teacher Training Degree program in Spanish universities regarding cinema as a teaching resource for the transmission of content in preschool and primary education. As a result, there are some specific objectives which include the following: To know the perceptions about the potentialities of cinema as a didactic resource for the transmission of content; secondly, to identify and analyze the possible significant differences in the perceptions about the potentialities of cinema as a didactic resource for transmission of content according to different variables, i.e., type of teacher training degree of the students, the Autonomous Community, the type of university, the number of films seen per week, and the type of cinema usually viewed; and finally, to focus on the training received in the teacher training degree program for the didactic use of cinema.

2. Materials and Methods

This study was conducted as a comparative *ex post facto* [40], and, in addition to providing descriptive information on the quantified variables, possible significant differences among the groups compared were analyzed.

2.1. Participants

This research was conducted with a Spanish sample of participants of 4659 students, from all the Autonomous Communities and 58 universities, of which there are 39 public and 19 private. This sample was selected using a quota sampling technique [41]. Of the participants, 15.5% ($n = 720$) were men and 84.5% ($n = 3939$) were women, based on a Spanish population of eminently female students. They were between 18 and 66 years old and had a mean age of 22.3 ($SD = 3.9$). In turn, 49.0% ($n = 2281$) were students in the Preschool Education Teacher Training Degree and 51.0% ($n = 2378$) in the Primary Education Teacher Training Degree. Additionally, 89.8% ($n = 4183$) were students from public universities and 10.2% ($n = 476$) from private universities. With regard to the distribution of the sample by Autonomous Communities, it was formed based on the student population of each community and the possibilities of access to universities. Figure 1 shows the percentages and frequencies of participants throughout Spain.

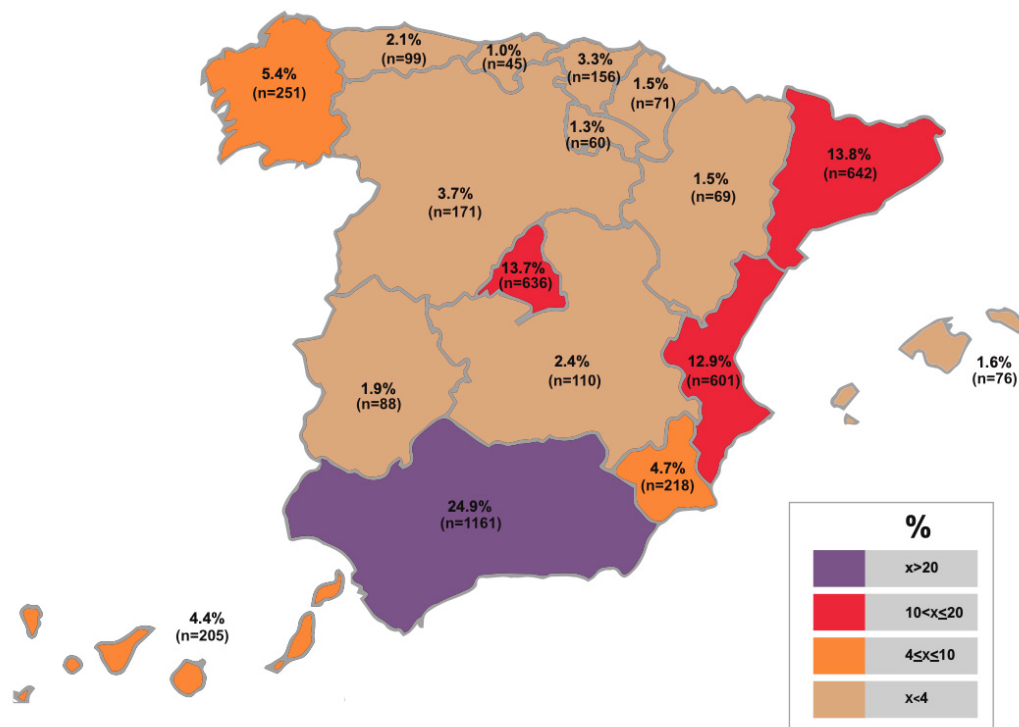


Figure 1. Sample percentages and frequencies by Autonomous Community.

Regarding the participating students according to the university, Table 1 is presented.

Table 1. Participant sample according to the university.

University	<i>f</i>	%
University of A Coruña	119	2.6
University of Alcalá	166	3.6
Alfonso X El Sabio University	3	0.1
University of Alicante	196	4.2
University of Almería	23	0.5
Nebrija University	19	0.4
Autonomous University of Barcelona	73	1.6
Autonomous University of Madrid	154	3.3
University of Barcelona	64	1.4
University of Burgos	24	0.5
University of Cádiz	155	3.3
Camilo José Cela University	24	0.5
University of Cantabria	41	0.9
CEU Cardenal Herrera University	35	0.8
University of Castilla-La Mancha	110	2.4
Catholic University San Antonio	33	0.7
Catholic University Santa Teresa de Jesús de Ávila	2	0.0
Valencia Catholic University San Vicente Mártir	9	0.2
Complutense University of Madrid	45	1.0
University of Córdoba	224	4.8
University of Deusto	13	0.3
European University of the Atlantic	4	0.1
University of Extremadura	88	1.9
Francisco de Vitoria University	13	0.3
University of Girona	158	3.4
University of Granada	116	2.5
University of Huelva	101	2.2

Table 1. Cont.

University	<i>f</i>	%
University of the Islas Baleares	76	1.6
International University of Cataluña	8	0.2
Jaume I University	223	4.8
University of Jaén	25	0.5
University of La Laguna	88	1.9
University of La Rioja	60	1.3
University of Las Palmas de Gran Canaria	117	2.5
University of León	27	0.6
University of Lleida	111	2.4
Loyola University Andalucía	30	0.6
Mondragón University	70	1.5
University of Murcia	185	4.0
University of Málaga	186	4.0
University of Navarra	23	0.5
University of Oviedo	99	2.1
University of País Vasco	73	1.6
Comillas Pontifical University	32	0.7
Pontifical University of Salamanca	33	0.7
Public University of Navarra	48	1.0
Ramon Llull University	96	2.1
Rey Juan Carlos University	180	3.9
Rovira i Virgili University	118	2.5
University of Salamanca	54	1.2
San Jorge University	15	0.3
University of Santiago de Compostela	35	0.8
University of Sevilla	301	6.5
University of Valladolid	31	0.7
University of Valencia	138	3.0
University of Vic	14	0.3
University of Vigo	97	2.1
University of Zaragoza	54	1.2
Total	4659	100.0

In line with the different number of participants according to the Autonomous Community, it can be seen that there is a greater number of universities that belong to the territories with the largest student populations. The total sample was representative of the analyzed population with a sampling error of 1.4% and a confidence level of 95.5%.

2.2. Instrument

The PECID questionnaire, consisted of 45 items, and was designed ad hoc for data collection. The first part of the questionnaire focused on cinematographic consumption habits and on the training received for the didactic use of cinema. The second part of the questionnaire focused on the perceptions about the potentialities of cinema as a didactic resource in preschool and primary education through a Likert-type scale with six response categories. The scale was structured in three dimensions. The first dimension related to cinema as a didactic resource of the transmission of content, the second dimension focused on cinema as a didactic resource of expression and communication, and the third dimension dealt with cinema as a didactic resource of critical analysis [42]. This study analyzed the first dimension, which consisted of 9 items. These items were submitted to expert judgment to validate their content. The reliability of this dimension was also analyzed, with Cronbach's alpha value of 0.963.

2.3. Procedure

For the gathering of data, we proceeded to identify the Spanish universities, both public and private, in the different Autonomous Communities, that offered the teacher training degree, based on the data provided by the Spanish Ministry of Education. As result, it was determined that, in Spain, 63 universities offer the teacher training degree, 39 public and 24 privates. The teaching staff of these universities were contacted by e-mail to inform them of the objectives of the research and to request their collaboration in disseminating the questionnaire among the students. Of all the universities, five private universities refused to participate in the study. The data were obtained during the academic year 18–19 through the Google Forms tool. The students were informed that their participation in the research was voluntary and anonymous. In this sense, any personal data that identified the students and did not respect their confidentiality of the data were removed from the questionnaire.

2.4. Data Analysis

The analyses of the descriptive statistics, with the frequencies, percentages, means, and standard deviations were carried out through SPSS version 21. For the comparative analysis of the possible significant differences among variables, parametric and non-parametric tests were used, establishing a significance value of $p < 0.5$. In this regard, statistical tests such as one-way ANOVA, *t*-test, Brown–Forsythe, and Mann–Whitney U were adopted. Otherwise, the least significant difference (LSD) was selected when conducting post-hoc tests for the comparison of means of more than two groups.

3. Results

In order to obtain univariate normality, the distribution of the data was analyzed. For this purpose, the Kolmogorov–Smirnov test was conducted, whose statistics gave a significance of 0.000, which indicated that the data did not show a normal distribution criterion. However, in relation to the values of asymmetry and kurtosis, these were less than 2 and 7, respectively, and therefore, following [43], could be considered to be within the norm.

3.1. Perception of Cinema as a Didactic Resource for the Transmission of Content

Table 2 presents the results on the potentialities perceived by students in a Teacher Training Degree program in Spanish universities of cinema as a didactic resource of content transmission according to the different response categories.

As can be seen, all items in the dimension have higher percentages of agreement than of disagreement, with Items 5, 8, and 9 standing out as having the highest means. In this sense, the Item 5 has the highest mean of 5.11, followed by Items 9 and 8, with means of 5.07 and 5.04, respectively. In terms of agreement grades, these three items are the only ones with the highest percentage of students in the category of totally agree, surpassing 42%, with a cumulative percentage in the three agreement categories above 90%. Regarding the remaining items, the response category that accumulates the highest percentage of students is quite agree. Thus, Item 1 has the highest percentage of agreement (42.6%), followed by Item 2 (42.1%) and Item 4 (39.8%). With a percentage of less than 39% of quite agree come Items 6 and 7, although with percentages also notably high in the category of total agree above 30%, which means that they have high means. Item 3 has the highest percentage of something agree (23.1%) and the lowest mean (4.70). If the global mean of the dimension is considered, the result is 43.90.

Table 2. Degrees of agreement and disagreement of the answers given on cinema as a didactic resource for the transmission of content.

Items	TD		QD		SD		SA		QA		TA		M	DT
	f	%	f	%	f	%	f	%	f	%	f	%		
1. To understand reality and the environment around us.	110	2.4	192	4.1	135	2.9	727	15.6	1985	42.6	1510	32.4	4.89	1.15
2. To work on the concepts of the different areas of the pre-school or primary school curriculum.	95	2.0	199	4.3	211	4.5	1043	22.4	1962	42.1	1149	24.7	4.72	1.13
3. To encourage the construction of personal identity and belonging to a group.	97	2.1	205	4.4	274	5.9	1075	23.1	1774	38.1	1234	26.5	4.70	1.17
4. To facilitate access to content with clarity, realism and authenticity.	102	2.2	194	4.2	240	5.2	1014	21.8	1854	39.8	1255	26.9	4.73	1.16
5. To motivate to learn in an attractive way and to favour attention.	111	2.4	153	3.3	139	3.0	478	10.3	1576	33.8	2202	47.3	5.11	1.16
6. To offer content in an experiential and meaningful way through globalizing methodologies.	100	2.1	199	4.3	224	4.8	869	18.7	1809	38.8	1458	31.3	4.81	1.17
7. To develop social and emotional skills and the capacity for conflict resolution.	114	2.4	194	4.2	233	5.0	883	19.0	1761	37.8	1474	31.6	4.80	1.19
8. To promote attitudes and values such as freedom, equality or respect for life and diversity.	112	2.4	157	3.4	153	3.3	573	12.3	1664	35.7	2000	42.9	5.04	1.17
9. To eliminate social and cultural stereotypes and prejudices.	123	2.6	163	3.5	160	3.4	543	11.7	1489	32.0	2181	46.8	5.07	1.20

Note: TD, totally disagree; QD, quite disagree; SD, something disagree; SA, something agree; QA, quite agree; TA, totally agree.

3.2. Type of Teachers Training Degree and Perceptions about Cinema as a Didactic Resource for the Transmission of Content

In order to identify possible significant differences in the perceptions of cinema as a didactic resource for the transmission of content according to the type of teacher training degree variable, the *t*-test of mean difference was carried out. The results reflected a significance value of 0.000. In this sense, the students of the Primary Education Teacher Training Degree perceive the potential of cinema with a significantly higher mean (44.39) than do the pupils of Preschool Education Teacher Training Degree (43.39).

3.3. Autonomous Community and Perceptions of Cinema as a Didactic Resource for the Transmission of Content

Table 3 presents the results regarding means and standard deviation of the groups compared according to the Autonomous Community where the students of the teacher training degree study. Moreover, in Table 4, the results of the one-way ANOVA can be observed to find the possible significant differences and the meanings behind them.

Table 3. Means and standard deviation of the Autonomous Communities for the dimensions on the potential of cinema as an educational resource for the transmission of content.

Variable	Autonomous Community	N	Mean	Standard Deviation
Perception of cinema	Andalucía	1161	44.02	9.17
	Aragón	49	42.65	9.79
	Asturias	99	42.97	10.65
	Islas Baleares	76	44.60	6.69
	Canarias	205	44.33	9.88
	Cantabria	45	47.22	8.41
	Castilla - La Mancha	110	42.80	11.03
	Castilla y León	171	41.99	10.10
	Cataluña	642	43.71	9.44
	Comunidad Valenciana	601	44.36	8.06
	Extremadura	88	44.28	10.32
	Galicia	251	44.34	9.78
	Madrid	636	44.54	7.92
	Murcia	218	42.67	10.80
	Navarra	71	42.25	11.93
	País Vasco	156	44.25	8.92
	La Rioja	60	40.76	11.34
	Total	4659	43.90	9.26

Table 4. One-way ANOVA results for the Autonomous Communities.

Variable	Source	SS	df	MS	F	p	Sense of Difference ¹
Perception of cinema	Between	3146.480	16	196.655	2.299	0.002	1, 4, 5, 6, 9, 10, 12, 13, 16 > 8,17; 6 > 1,2,3,7,9,10, 14, 15; 1,10,13 > 14; 13 > 15; 11 > 17
	Within	39,7108.016	4642	85.547			

Note (1): Andalucía = 1; Aragón = 2; Asturias = 3; Islas Baleares = 4; Canarias = 5; Cantabria = 6; Castilla- La Mancha = 7; Castilla y León = 8; Cataluña = 9; Comunidad Valenciana = 10; Extremadura = 11; Galicia = 12; Madrid = 13; Murcia = 14; Navarra = 15; País Vasco = 16; La Rioja = 17.

The findings obtained reflect numerous significant differences among the different Autonomous Communities. It is worth noting that Cantabria has the highest mean (47.22) with a significant difference with respect to several Autonomous Communities, such as Aragón (42.65), Asturias (42.97), Castilla y León (41.99), and La Rioja (40.76), among others, with the latter two communities having the lowest means. The Comunidad Valenciana (44.36), Andalucía (44.02), and Madrid (44.54) also have considerably high means, and the students of all three perceive significantly more potential than do the students of Murcia (42.67).

In order to confirm the significant differences detected with the parametric one-way ANOVA test, the test for the robustness of Brown–Forsythe means was carried out and its results also showed a significance with a value of 0.008.

3.4. Type of University and Perceptions about Cinema as a Didactic Resource for the Transmission of Content

The results of the *t*-test of difference of means to compare the perceptions of students of public and private universities give a *p*-value of 0.303, and therefore we can state that there are no significant differences between these two groups. If we look at the means, they are very similar, although students from private universities perceive, with a higher mean (44.31), more potential in cinema as a resource for transmitting content than students from public universities (43.85).

3.5. Number of Films Viewed per Week and Perceptions of Cinema as a Didactic Resource for the Transmission of Content

For the comparison of groups according to the number of films viewed per week by the teacher training degree students, nine groups were established, from the student body that viewed more than seven films to the one that did not view any films. The results of the means showed that the group that viewed more than seven movies had the highest mean (46.53), followed by those who viewed seven (46.26), and those who viewed six (45.98). Those who viewed five (44.87), four (44.42), and two (44.39) films a week had more moderate means. The lowest means were those who viewed three films (43.84), one (43.39), and none (43.13). Table 5 shows the results of the one-way ANOVA test to find significant differences.

Table 5. One-way ANOVA results for the number of films viewed per week.

Variable	Source	SS	df	MS	F	p	Sense of Differences ¹
Perception of cinema	Between	2001.160	8	250.145	2.921	0.003	2 = 5 = 6 = 8 > 0 = 1; 4 > 0; 8 > 3
	Within	398,253.336	4650	85.646			

Note (1): 0, no film; 1, one film; 2, two films; 3, three films; 4, four films; 5, five films; 6, six films; 7, seven films; 8, more than seven films.

As can be seen, the results reflect significant differences between the students who view different numbers of films per week, specifically between those who view more films and those who view fewer, with the former perceiving more potential. In this sense, those students who view two, five, six and more than seven films perceive the potential of cinema with significantly higher means than those who view one film or none.

Similarly, the results of the Brown–Forsythe test on the robustness of means confirm the existence of significant differences with a value of 0.001.

3.6. Type of Cinema Usually Seen and Perceptions about Cinema as a Didactic Resource for the Transmission of Content

In order to compare perceptions according to the type of cinema usually seen, seven groups were established according to three main categories of cinema, i.e., fiction, documentary, and animation, as well as their different combinations. In Table 6, we can see the results obtained after performing the *t*-test to compare the perceptions according to whether the student is a regular consumer of only fiction films.

The data show that there is a significant difference, with a value of 0.000, with regard to how the potential of cinema is perceived as a resource for the transmission of content.

In relation to the comparison between students who only view documentary films, the results of the *t*-test show a *p*-value of 0.433, which reflects that there are no differences in the perceptions that can be considered to be significant, despite the fact that students who only view documentary films have a higher mean, i.e., 45.20 as compared with 44.00. Furthermore, since the students who view only documentary films are a small group of 20 people, a second test, the non-parametric Mann–Whitney

U test, was carried out to confirm possible significant differences between the groups. The results showed a p -value of 0.315, which also confirmed the absence of significant differences.

Regarding the comparison of perceptions among the teacher training degree students according to their habit of viewing only animated films, the results of the t -test show values lower than 0.05, specifically, 0.011, which shows significant differences. As for the means, students who viewed only animated films have a mean of 40.26, whereas those who viewed more than only animated films have a mean of 44.06.

Table 6. Results of the t -test of difference of means between students according to viewing only fiction films.

Variable	Levene		Yes Fiction		No Fiction	
	F	p	$M (SD)$	$M (SD)$	t	P
Perception of cinema	24.54	0.000	43.33 (9.63)	44.89 (8.48)	5.49 (39)	0.000 ¹

M, mean; SD, standard deviation, in brackets. The degrees of freedom are indicated in brackets next to the t value. Note (1). t -test for unequal variances.

Regarding the results on the differences in perceptions according to the students who usually view several types of cinema, if we pay attention to those who view both fiction and documentary films, the findings obtained in Table 7 are presented.

Table 7. Results of the t -test of difference of means between students who viewed and did not view fiction and documentary films.

Variable	Levene		Yes Fiction + Documentary		No Fiction + Documentary	
	F	p	$M (SD)$	$M (SD)$	t (4099)	P
Perception of cinema	4.03	0.045	45.88 (7.67)	43.89 (9.26)	3.81(27)	0.000 ¹

M = Mean; SD = Standard deviation, in brackets. The degrees of freedom are indicated in brackets next to the t value. Note (1). t -test for unequal variances.

The data obtained show that the combination of fiction and documentary cinema determines differences in the perception of cinema as a resource that transmits content with a significance of 0.000. Meanwhile, if the comparison between students who view fiction and animation films together is considered, the results of the t -test of differences give a p -value of 0.000. Thus, those who view these two types of cinema perceive significantly more (44.86) the potential of cinema as compared with the other group (43.65).

With regard to the results of the t -test for the comparison of the students' perceptions, if they usually view documentary films and animations, the p -value is greater than 0.05, specifically, 0.687, and therefore there is an absence of significance. If we look at the means, those who view documentary films and animation films together have a mean of 44.01, and those who do not view this combination of films have a mean of 42.50. Similarly, since a small group of six people view the aforementioned types of films, a second test was carried out, the non-parametric Mann–Whitney U test. The results of this test are also insignificant, with a p -value of 0.166.

Finally, if we compare the perceptions of cinema according to the students who usually view three types of films, i.e., fiction, documentary, and animation, the t -test gives results of 0.023, showing significant differences. In this sense, those who usually view fiction, documentary, and animation films at the same time perceive the potential of cinema as a didactic resource with a higher mean (45.28) as compared with those who view only one or two types of films (43.92).

3.7. Training in the Degree and Perceptions about Cinema as a Didactic Resource for the Transmission of Content

In order to identify if the variable of training in the didactic use of cinema influences the perceptions on the potentialities of cinema as a resource for the transmission of content, a *t*-test was performed, and the results obtained gave a *p*-value of 0.080. This indicated that, although students who had received training had a higher mean (44.55) than those who had not received training (43.81), no significant differences were found.

4. Discussion

The aim of this research was to examine the perceptions of students in a Teacher Training Degree program in Spanish universities about the potential of cinema as a didactic resource for the transmission of content. The findings reflected that these students consider cinema to be a resource of great educational potential to be applied in preschool and primary education classrooms. In this sense, all the potentialities presented are perceived with percentages of disagreement lower than 13%. This fact is relevant because, as stated in [44], the positive perception of a resource and its contributions to professional practice is one of the most important factors for its subsequent educational implementation.

The greatest potential perceived with cinema is to motivate learning in an attractive way and to encourage attention. This finding is important because, as some studies have shown [45,46], motivation is one of the factors that positively influences learning. The aforementioned perception is also in line with the audiovisual and emotional nature of cinema, capable of generating empathy and connection above other media. In addition, as a powerful generator of collective imagery and role models, the potential in the classroom to promote attitudes and values and eliminate stereotypes is very clearly perceived. The perceived relevance of cinema in spreading values coincides with that obtained by [47] for the more general area of media. This perception can be associated with the fact that [48–52] stated that fictional films were the preferred medium for consumption. However, it was perceived in a less accentuated way, that cinema could favor the construction of personal identity and belonging to a group. This could be due to the fact that cinema is a medium that can shape the personality of individuals with its capacity to represent and transmit reality [53]. However, on the one hand, in cinema, if there is not a critical eye, it can become a powerful resource for indoctrinating and manipulating the thoughts and feelings of students [54]. On the other hand, remarkably, it is perceived with high degrees of agreement that cinema can generate experiential learning and can be applied to globalizing methodologies. Because cinema is a medium that conveys content through various senses, with images and sounds, it generates a sensation of experience that can be of great use in developing better learning, as observed by [23,30].

As for significant differences in perceptions, if we look at the type of teacher training degree, this study found that students in a Primary Education Teacher Training Degree perceive significantly more potential. This perception is in line with the vision that cinema is more appropriate for the psycho-evolutionary characteristics of Primary pupils, and that it can capture their attention and motivate them more, making it possible to go deeper into their potentialities, such as viewing a greater variety of types of cinema and doing more activities. It is worthwhile also mentioning that, with the Royal Decree 126/2014, the work with audiovisual resources and the development of audiovisual skills is more present in primary education as one more task of consolidation and not only of initiation. In this sense, this presence was identified by [15,55–59].

In relation to the variable of the Autonomous Community of the students, significant differences were found in the perceptions of cinema, with some communities perceiving higher potentialities as compared with other communities. For example, students from Cantabria had the highest average for perceiving cinema as being a didactic resource for the transmission of content with educational potentialities. The significance of Cantabria is shown in regard to eight of the seventeen Autonomous Communities. The existence of significant differences is also reflected in other communities with high means, such as Madrid, Andalucía, and the Comunidad Valenciana, to name a few. These differences,

as noted in this study, are influenced more by the cinematographic habits and, to a lesser extent, by training, than the Autonomous Community in which they live. In this sense, in communities with a greater number of students who view more films per week, who habitually view different types of cinema, and who have more training, more potential is perceived. The results obtained are in line with those of [60], who found differences in the perceptions of future teachers regarding the educational use of mass media depending on the territory.

Regarding the variable of ownership of the university to which the students belong, no significant differences were found between private and public universities. It should be noted that the students had similar ages and habits. Furthermore, concerning the curricula of the teacher training degrees, it should be borne in mind that despite the fact that there are different subjects in each university, the areas of knowledge are common, and therefore there are no significant differences in the design of the academic training. In addition, it should be added that the initial training of teachers should consider the curricula established for preschool and primary education. With regard to the number of films viewed in the film consumption habit, people who view more films have a greater familiarity and link to cinema, and therefore a wider knowledge of the possibilities it can have. This wider knowledge is manifested in the fact that significant differences are expressed and become progressively greater as more films are viewed, with the differences being more pronounced in relation to those who view more than seven films a week.

Continuing with film consumption habits, the type of cinema usually viewed is also a variable that generates significant differences in the perceptions of the potential of cinema as a resource for the transmission of content, since it largely determines the vision of cinema, and therefore also at the educational level. In this sense, students who usually view only fiction or only animation films have a significantly lower perception of the potential of cinema. Conversely, on the one hand, if students usually only view documentary films, although not hugely significantly, they do perceive more potential in cinema. This finding is in line with what was said by [61–63] who characterized documentary filmmaking as a type of cinema especially suited for educational purposes beyond escape or simple entertainment. On the other hand, when the viewing of various types of cinema is combined, perceptions change, and more potential is identified for its applications in education. This is consistent with the fact that by viewing various types of cinema the student has a wider and more varied knowledge of what each type of cinema can offer, and therefore of the various functions that cinema can have in education. The differences in perceptions become significant when one habitually views fiction and documentary films, fiction and animation films, and when one views fiction, animation, and documentary films.

Furthermore, if we look at the training variable within the teacher training degree, no significant differences were found in the perceptions of cinema as a resource for the transmission of content, which reflects that the perceptions of this educational dimension of cinema are influenced to a greater extent by film consumption habits.

5. Conclusions

On the basis of the obtained findings, the following conclusions are highlighted:

1. Students in Teacher Training Degree programs perceive with a high degree of agreement that cinema has numerous potentialities to be used in preschool and primary education classrooms as a didactic resource for the transmission of content. Furthermore, the greatest potential perceived in cinema is as a motivating resource to learn in an attractive way and encourage attention.
2. Students' perceptions of the use of cinema in education vary significantly according to the type of teacher training degree, the Autonomous Community, the number of films viewed per week, and the type of cinema usually viewed.

As a limitation of the study, it is worth mentioning the fact that five private Spanish universities refused to collaborate in the study. This meant that a larger and more balanced sample could not be

obtained and that students from all universities could not participate. It should also be noted that unequal access to universities prevented a representative sample from each of them.

This study is a pioneer in the subject, and aims to initiate a line of research for later studies, to complement it with other approaches, and to consider in more depth direct applications of the educational potentialities of cinema that have been detected. This research revealed that students of teacher training degree programs perceive numerous educational possibilities of cinema, and recommends implementing specific training to provide future teachers with preparation for the optimal educational use of cinema. It should imply a change in the training curricula to guarantee a greater prominence of cinema. In this sense, a specific subject should be included that addresses training in audiovisual resources, such as film, for educational use. This subject should be approached by going beyond technical approaches that reduce cinema to a mere technological instrument, giving priority to reflective and knowledge-creating approaches. Its contents should address both didactic training for the educational use of cinema. In addition to this, cinema needs to be considered as an audiovisual language and a means of artistic expression. Moreover, cinema could be considered to be a resource to work in a transversal way in the agenda of subjects in order to explore its educational possibilities in different knowledge areas. In this sense, priority should be given to training in the creation of activities through film. Furthermore, teachers of Teacher Training Degree programs should carry out activities with students using film. In addition, it is recommended that faculties of education take initiatives for the diffusion of cinema with special cultural and educational value. As a result, faculties of education should be organizing cineforums and film conferences that exposes students to cinema that enriches the cultural baggage and promotes critical and reflexive views of cinematographic works.

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