

The impact of a cinema literacy program through the theory of planned behaviour on the attitudes of primary school students towards people with special educational needs and disabilities

Poulios, I.^{1*}, Evaggelinou, C.¹, Antoniou, P.², Tsigilis, N.³, Dimitropoulou, D.¹, Krystallis, C.¹

¹School of Physical Education & Sport Sciences – Serres, Laboratory of Adaptive Physical Education, 62110 Agios Ioannis, Serres, Greece

²Department of Physical Education & Sport Science, School of Physical Education & Sport Science, Democritus University of Thrace, Komotini 69100, Greece

³Department of Journalism and Mass Media Communication, Aristotle University of Thessaloniki, 46 Egnatia Ave, 54625 Thessaloniki, Greece

Abstract

The purpose of this study was to examine the impact of an intervention program on cinema literacy on the attitudes of students in the last two grades of Primary Education towards students with Disabilities and / or Special Educational Needs. The study involved 597 pupils aged 10-12 years, who were divided into four groups, three Intervention Groups (IG) and one Control Group (CG). The first IG was composed of students who watched movies about disability, the second IG of students who attended the same films and discussed about them, while in the third IG students made a film that was about disability. Students in the control group did not participate in the activities of the intervention groups at all. Before and after the intervention programs, all participants in the research groups filled in the Designated Behaviour questionnaire (Theodorakis, Bagiatis & Goudas, 1995) and the General Attitudes Questionnaire (Nikolaratzi & Reybekiel, 2001). The results of the study revealed that the students who participated in the intervention program showed a more positive attitude and a higher degree of acceptance of children with disabilities following the completion of the program, while it did not produce the same results for the pupils in the control group. The conclusion is that film education programs are a useful tool for raising students' awareness of disability.

Keywords: Inclusion; Attitudes; Short Films; Disability.

1 Introduction

The modern trend in education and the main objective of the education policy of many countries today is the inclusion of children with disabilities and special educational needs in general education schools. The basic philosophy of inclusive education, adopted by the UNESCO World Summit in Salamanca in 1994, is the right to education for all children and the establishment of “schools for all” where all children study, understand their peculiarities and assist their learning (Vislie, 2003).

The creation of schools in which inclusive programs are implemented implies changes in the general educational policy but also especially in the structure and functioning of the school. The success of inclusive education, however, depends to a large extent on the attitudes of students and teachers on both inclusive education and students with special educational needs and disabilities (Hodkinson, 2007; Lindsay, 2007). The positive

*Corresponding author: e-mail: serreschools@gmail.com

attitudes of peers instil in students with special educational needs and disabilities a sense of acceptance that is also necessary to achieve the school's learning goals (Shaffner & Buswell, 2004).

The attitudes of students with no disabilities to inclusive education are influenced by a number of factors (Kourea & Ftiaka, 2003) (eg, age, gender, type of disability, degree of inclusive education, classroom composition, participation in educational programs, (Ferguson, 1999), previous experience with students with disabilities, etc. For this reason, it is recommended by the researchers to design and implement intervention programs aiming at influencing these attitudes in order to become more positive and lead to the acceptance and eventual integration of pupils with special educational needs and disability in the general education school. These programs use various educational tools: theatre, dance, fairy tale, music, cinema, etc. In this paper we will evaluate the impact of an intervention program based on the cinema as an educational tool and more specifically short films on disability.

2 Theoretical Framework

Ajzen (1988) defines attitudes as positive or negative reactions of the individual towards another person or behavior. Attitudes are one of the factors that determine human behavior, as a result they can help in the study and, more importantly, in the explanation of human actions (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

In the field of Social Psychology, many theories have been developed so as to study the attitudes of people without disabilities towards people with disabilities. One of these is the Theory of Planned Behaviour (TPB) (Ajzen, 1985, 1991, 2002b), which is the evolution of the Theory of reasoned action model with the addition of perceived behavioural control (a person's belief that action is under his direct control), which is an additional precursor to the behavior on intention.

The mechanisms of shaping people's behaviour are the subject of many studies because their understanding can help design educational programs that seek to change attitudes and change this behaviour. Although the TPB does not provide suggestions for a change in behavioural factors, Ajzen (2005) argues that it provides important information for the design of such interventions. Therefore, since it is accepted that behaviour is shaped by the factors of attitudes, subjective norms and perceived behavioural control, any attempt to change behaviour should target these factors. Based on the above positions, many intervention programs have been designed to promote awareness and social interaction between people with and without disabilities. These programs can improve beliefs and, therefore, attitudes (Odom, 2000). Most of them use a variety of strategies and techniques, the main purpose of which is to promote knowledge and positive attitudes towards people with disabilities. Some of these strategies / techniques are: contact with people with disabilities, group-specific information, discussions on non-academic group experiences, collaborative teamwork, interpersonal development, disability simulation and educational action programs (Holtz & Tessman, 2007; Krahe & Altwasser, 2006; Swaim & Morgan, 2001).

In recent years, new, digital forms of expression (cinema, television, multimedia and the internet) have an impact on education by introducing new methods and new tools into school reality. The traditional curriculum is enriched with "media education" actions, i.e. with educational programs aimed at providing students with the skills to interpret, understand and decode media and become critical users and creative producers of their own audiovisual products (Buckingham, 2002).

One of the pillars of "Media Education" is Film Education, the educational use of cinema in the classroom. Cinema literacy can contribute to a more meaningful perception

of reality (Arroio, 2007) and enhance the social intelligence of students by helping them to bridge their knowledge with the experiences of the outside world (Ahmed, 2012). Media Education programs in particular Film Education programs, create an attractive learning environment and seem to have an impact on students' attitudes towards social issues and social groups as well as on their individual choices and daily habits (Sobers, 2008). The impact of cinematographic products on viewers' attitudes is highlighted by the findings of many researchers linking watching movies to smoking (Dalton et al., 2003; Pechmann & Shih, 1999), to the sexual behaviour of adolescents and their sexual habits (O' Hara et al., 2013; Udofia & Ton, 2013), the aggressive behaviour of young viewers (Anderson, 1997), the likelihood of aggressive behaviour in the future (Browne & Hamilton-Giachritsis, 2005), the anxiety of the viewers about death (Lu & Heming, 1997; Niemiec & Schulenberg, 2011), better mental health of viewers (Noah, 2005), stress relief (Dumtrache, 2014), spectators' attitudes towards the issue of climate change (Howell, 2011), viewers' views on environmental issues (Bahk, 2011, Eagles & Demare, 1999; Skanavis & Sakellari, 2009) the promotion of values and attitudes (Ahmed, 2012; Mahmood, 2013), the attitudes of young viewers towards the female gender (Morawitz & Mastro, 2008), their cultural standards (Juni, 2014; Semiu, 2011), their daily behaviour, their interpersonal relationships and their everyday habits (Vasan, 2005), gender stereotyping (Steinke et al., 2007), viewers of various occupations (Kaskaya et al., 2011), the reduction of stigmatisation for mental illness (Jin & Ritterfeld, 2006) and the romantic beliefs of viewers (Hefner & Wilson, 2013). A series of studies examines the impact of cinema on viewers when intervention programs were implemented that included not only film screenings but also discussions about them. Researchers see an impact on spectators' attitudes to science (Allison, 1966), better understanding of environmental problems (Toledo, 2015), improvement of the communication skills of viewers (Hager, 2015), changing attitudes towards school (Allen et al., 1968), influence on the positive thinking of viewers (Smithikrai, 2016), improvement in professional ethics (Self, Baldwin & Olivarez, 1993), change of attitudes towards the elderly (Mcleary, 2014) and acquisition of personal responsibility (Smithikrai et al., 2015). According to the theory of planned behavior, it seems that the cinema has a positive impact on spectators' "intention" towards environmental issues (Μαγγουρίτσα κ.ά., 2005). This means that the movies could be used as effective tools in order to change the individuals' intention towards a series of social issues. Finally, other researchers (Ying & Baboo, 2015) concluded that the creation of films by the students themselves dramatically improves students' awareness and active citizenship.

It follows from the above that Cinema Literacy programs can cause a change in attitudes. Although such programs have been successfully applied to the attitudes of a wide range of social issues, their effectiveness in developing positive attitudes towards disability has not been examined. The purpose of this study was to examine a) whether a cinema literacy program can be used to change students' attitudes toward people with disabilities and b), the impact of three different cinema literacy programs on children's attitudes toward people with disabilities.

3 Method

3.1 Participants

In the present study, the participants were 597 students of the Fifth (N = 336) and Sixth grade (N = 261) of elementary schools, aged 11-12 years. Fifteen (15) Primary Education

schools were selected, located in different regions of Greece (Serres, Thessaloniki, Athens, Messinia, Heraklion Crete, Imathia, Ioannina, Florina, Rodopi, Lesvos).

The students who participated in the study were divided into four (4) groups: a control group (CG) and three intervention groups (IG). In each intervention group, a different intervention program based on "film literacy" was implemented in order to assess not only the impact of the film education program on students' attitudes towards people with disabilities but also the possible impact of a specific program.

The first group was the control group (N = 271). These students didn't participate in any cinema literacy program. Students of the first IG (N = 143) attended the "movie screening" program, in the second IG (N = 160) the students participated in the program "film projection and discussion", while students of the third IG (N = 23) attended a program in which they were asked to shoot a short film.

3.2 Instruments

Two questionnaires were used to assess the attitudes of pupils and students.

The first was the "general attitude" questionnaire (Nikolaratzi & Reybekiel, 2001), designed to assess the attitudes of students without disability towards their intention to approach, create a relationship, and accept classmates with disability. The questionnaire consists of nine questions. The grading of responses takes place on a five-level Likert scale, ranging from 1 ("definitely not") to 5 ("definitely yes"), where 1 indicates absolute negative attitude and 5 positive attitudes.

The second measurement tool was the "Planned Behaviour" questionnaire (Theodorakis et al., 1995) which evaluates the following variables:

A) "Attitude towards children with disabilities" (the attitudes of students in order to accept disability), which was estimated by the total score on the responses to six questions.). This variable was assessed by statements such as: "I think that the acceptance of peers with disabilities in the physical education class is..."

B) "Intention" (the intention of students to accept pupils with disabilities in their classroom), which was estimated by the total score on the responses to three different questions This variable was assessed by statements such as: "I intend/ I am determined to accept peers with disabilities in the physical education class"

C) "Perceived behavioural control" (Expresses individual beliefs about the ease or difficulty of performing a specific behavior), which was estimated by the total score on the responses to four questions). This variable was assessed by statements such as: "whether I will or not accept peers with disabilities in the physical education class depends on me".

D) "Moral obligation" (an obligation arising out of considerations of right and wrong regarding peers with disabilities), which was estimated by the total score on the responses to three questions. This variable was assessed by statements such as: "I would not feel guilty if I didn't accept a peer with disability in the physical education class".

E) "Important others" (expresses individual beliefs whether important others would approve or disapprove of the behavior towards peers with disabilities), which was estimated by the total score on the responses to four questions. This variable was assessed by statements such as: "Many people important to me, support that I should/should not accept a peer with disability in the physical education class".

F) "Information" (that students had about the different disability types), which was estimated by the total score of four questions. This variable was assessed by statements such as: "I consider myself as informed for issues regarding integration".

G) "Choice" (of the students without disability towards the integration of their classmates with disability in general school), which by the total score on the responses to two questions. This variable was assessed by s statements such as: "If you were told to

accept a peer with disability in the physical education class, what would be your decision?"

The answers to the questions were evaluated on the Likert scale of seven points, where the grade one (1) corresponded to the negative and the grade seven (7) to the positive one, while the grade four (4) was defined as a neutral.

As far as the responses to the behavioural choice were concerned, they had a percentage scaling of eleven (11) grades, starting from "accepting him / her" (100% to 20%) and reaching "I do not accept him / her" (100% to 20%).

Also, in this case, for the evaluation of the answers, a Likert-type scale, which had 11 grades, was used. Thus, 100% on the left echoed the view of "accepting him / her" and to the most positive attitude, while 100% of the right echoed the view "not accepting him / her" and to the most negative attitude. Since, 5 was in the middle (indecisive), this figure corresponds to the neutral behaviour.

In order to measure the credibility of the internal consistency of the factors (of the questionnaire), the Cronbach index of α was used to find that the confidence index was too high, since the measurement results ranged between 0.79-0.84.

3.3 Intervention program

The intervention program was based on films which were produced by schools. These schools participated in the annual International Student Film Competition, which was implemented with the approval of the Ministry of Education and Research.

Six (6) award-winning short films were selected from the above- mentioned entries the subject of which was disability. These films were evaluated by a special committee, both in terms of language, subject matter, duration and type, as well as on issues concerning the identity of the creators, the tools used for filming, their philosophy and the messages they wanted to send and were found suitable for students in the last grades of Primary School (E and F). The same committee gave its approval, judging that these films could be used to assess how cinema and especially short films can affect students' attitudes about various social issues. The films screened are: a) Lemon and Lime, b) Disabled children are invisible in schools, c) As long as you can, d) The nightingale, e) Small Pleasures, f) Maria's journey.

The intervention program was divided into four (4) stages.

Initially, teachers were informed about how they should explain / answer manage the students' questions and how to direct the discussion that followed after the films were projected. Then students were asked to fill in the questionnaires. The third stage included the projection of the films per week. After each screening the students of the second subgroup (View and Discussion) participated in a classroom discussion about the film and its "textual" functions. These discussions were based on media education's "critical" approach, i.e. the pursuit of the students' critical ability to interpret and evaluate the content of these films. According to the "Moving Images in the Classroom" manuscript, published in 2000 by the British Film Institute (Buckingham, 2008) students aged 11-12 years old through the viewing and processing of the short films, should be able to do the following:

- Explain how social groups, events and ideas are depicted in the film, using terms of "stereotypes", "representation" etc
- Explain and justify aesthetic judgments and personal views and reactions
- Discuss alternative ways of representing a group, event or idea

The selection of short films which were created by students- and not professional films created by professional filmmakers - was based on the principles of social identity theory. According to this theory (Tajfel & Turner, 1979), a person's social identity consists of the aspects of his/her self-image derived from the social groups in which (s)he thinks (s)he belongs. A student tends to attach particular importance to the behaviours and attitudes of the group (s)he belongs to (that is his peers) and is expected to be more easily influenced if the short films to be used were created by members of that group. Also, Bandura (1969) in Social-Cognitive Learning Theory states that individuals are more likely to adopt a certain behaviour if the model (in this case, peer film-makers and leading actors) is similar to the observer, in this case peer viewers of the films.

In addition, a discussion board for the classroom was proposed to the participating teachers so that the processing and analysis of the particular films is better structured. This analysis scheme was first based on the theory of semiology as formulated by the Swiss linguist Saussure (Chalevelaki, 2010) and as extended to visual communication by Bart (1977). From the above theory, the methodological tools of image analysis emerge (in our case of short films) as they were described by Kress and Leeuwen (2010) in Image Reading.

Halliday (1985) was the first to describe three functions in the interpretation and understanding of the moving image: the representation (representation of society), the interpersonal (gravity in action), and the textual (referring to the reliability of the messages). Based on the above functions, the proposal for analysis to teachers was formulated. In particular, this proposal was divided into four parts: the identity of the film, its plot, the way the disability and people with disabilities are presented in the film and the language of the cinema.

The intervention program was completed two months after the last questionnaire completion, with a replenishment of the students in order to ascertain whether their views were maintained.

3.4 Data collection

The intervention program was carried out with the permission of the Ministry of Education, Research and Religious Affairs. The researcher then contacted the School Directors who participated in the intervention program as well as the teachers and then visited the schools to inform them about the procedure of the intervention program, the place and time of its implementation. At the same time, parents' consent was asked in order for their children to participate in the intervention program

After answering all the questions of the students, the questionnaires were distributed and completed in a time interval of 20-25 minutes. It should be noted that, in all the schools that participated in the survey, the completion of the questionnaires by students was done at the same time.

The intervention program started one week after the first questionnaire completion and lasted six (6) weeks. Six (6) selected short films were screened in these six weeks (one film per week). During this same time the third experimental group created a short film on disability. The participants to this group watched movies about people with disabilities and discussed about them. Afterwards, they chose their own movie subject, they wrote the script, they assigned everyone's responsibilities (actors, directors, montage, music etc.) and they filmed their movie.

With the completion of the screenings, debates and film-making, the students were asked to fill in questionnaires for the second time, and after two months, after the completion of the intervention program, the questionnaires were replenished by the students, in order to determine the degree of preservation of their opinions (retention measurement).

3.5 Statistical analysis

Data processing was performed with the SPSS 23 statistical package. In order to test the internal consistency, the Cronbach's α index was used for all instruments. Pearson correlation was used to examine the relationship observed between the individual subclasses of the questionnaires.

Mean values and standard deviations were used to describe the study data. In order to investigate the impact of cinema literacy programs on attitudes of students without disabilities to students with disabilities, two-way ANOVA with repeated measures was adopted. The significance level was set at $p < .05$.

4 Results

Initially, the internal coherence of the measurement scales and the correlations between the questionnaire variables were investigated in order to check the reliability of the questionnaires used in the survey.

Table 1. Internal consistency of measurement scales per measurement and Correlation between subclasses of the Planned Behaviour before and after intervention

1 st measurement \ 2 nd measurement	N	Cronbach's α		1	2	3	4	5	6	7	8
		1 st	2 nd								
1. General Attitude	597	.58	.73		.61**	.41**	.29**	.09*	.28**	.33**	.40**
2. Attitude towards	597	.80	.86	.48**		.50**	.26**	.18**	.35**	.27**	.48**
3. Behaviour											
Intention	597	.63	.78	.44**	.43**		.34**	.22**	.52**	.31**	.56**
4. Perceived behaviour control	597	.59	.67	.47**	.42**	.53**		.01**	.31**	.35**	.37**
5. Moral Obligation	597	.14	.37	.30**	.22**	.31**	.20**		.23**	-.02	.16**
6. Important others	597	.80	.76	.41**	.41**	.58**	.47**	.31**		.35**	.60**
7. Information	597	.82	.87	.36**	.42**	.37**	.46**	.22**	.43**		.43**
8. Choice	597	.67	.82	.53**	.41**	.63**	.53**	.26**	.63**	.47**	

The internal consistency of the measurement scales ranged from .58, (initial measurement of the variable "general attitude"), to .87 (third measurement about the variable "information"). As shown in the above table (Table 1), the eight (8) subclasses have a high reliability index for the third and last measurement. In general, the subscales in the questionnaire showed satisfactory internal consistency according to Cronbach's index α with the exception of the "Moral Obligation measures in which an extremely low and unacceptable internal consistency was reported, fact which consists a study limitation.

The use of Pearson correlation (r) was done to examine the relationship between the individual constructs of the questionnaire. Table 1 shows that before and after the implementation of the intervention program, all of the components in the questionnaires had significant and positive correlations between them. Indeed, it is worth highlighting the significant degree of positive correlation occurring after the end of the intervention program, between "choice", intention" ($r = 0.63$) and "important others" ($r = 0.63$). The degree of inter-correlation was also positive in each of the two measurements made. Specifically, in the first measurement the degree of inter-correlation ranged between 0.2 and 0.61, while in the second measurement it was at levels of 0.20 to 0.63.

After that, the averages and standard deviations (Tables 2 and 3) were then examined for all groups and for all questionnaire determinants before and after the implementation of the intervention program.

Table 2. Average and standard deviations of Control Group students before and after the intervention program

	1 st measurement		2 nd measurement		F	Sig.	Partial η^2
	Average	SD	Average	SD			
General Attitude	3.66	.52	3.75	.54	1.463	.227	.005
Attitude towards Behaviour	5.59	.96	4.94	1.28	.404	.526	.002
Intention	6.06	1.04	6.00	1.01	.243	.622	.001
Perceived behaviour control	5.13	1.17	5.23	1.21	.001	.969	.000
Moral Obligation	5.08	1.27	5.05	1.29	.238	.626	.001
Important others	6.22	.88	6.04	.97	.000	.987	.000
Information	4,76	1.45	4.61	1.54	1.474	.226	.005
Choice	9.93	1.42	9.84	1.52	.224	.637	.001

As can be seen from the above table, no statistically significant differences were observed before and after the intervention program ($p > 0.05$).

Table 3. Averages and standard deviations of Intervention Groups students before and after the intervention program

	1 st measurement		2 nd measurement	
	Average	SD	Average	SD
General Attitude	3.42	.46	3.70	.53
Attitude towards Behaviour	5.23	.89	5.69	1.01
Intention	6.01	.98	5.97	1.01
Perceived behaviour control	5.30	1.16	5.39	1.16
Moral Obligation	5.00	1.33	5.28	1.29
Important others	6.27	.84	6.24	.86
Information	4.83	1.20	5.12	1.15
Choice	9.85	1.35	9.96	1.39

Table 3 shows that in the experimental group, statistically significant differences were observed only for constructs "General attitude" ($F_{(2, 595)} = 23,894$, $p < .001$, partial $\eta^2 = 0,129$) and "Attitude towards Behaviour" ($F_{(2, 595)} = 27,693$, $p < .001$, partial $\eta^2 = 0,146$). Regarding «perceived behavioural control» ($F_{(2, 595)} = 1,994$, $p < .138$, partial $\eta^2 = 0,012$) «moral obligation» ($F_{(2, 595)} = 2,841$, $p = .060$, partial $\eta^2 = 0,017$) «Intention» ($F_{(2, 595)} = 0,848$, $p = .429$, partial $\eta^2 = 0,05$) «information» ($F_{(2, 595)} = 1,719$, $p = .181$, partial $\eta^2 = 0,11$) «Choice» ($F_{(2, 595)} = 0,859$, $p = 0,424$, partial $\eta^2 = 0,005$), and «Important Others» ($F_{(2, 595)} = 1,147$, $p = 0,319$, partial $\eta^2 = 0,007$) no statistically significant differences were observed. It is,

therefore, concluded that the intervention program worked positively on students' attitudes only in terms of general attitude and attitude towards behaviour.

Then, the impact of every cinema literacy program was examined separately on the attitudes of the students without disability to the students with disability.

In Tables 4,5 και 6 we can see the means and standard deviation related to the attitudes of the students to the students with disability before and after the intervention programmer intervention subgroup (IG₁: film screening, IG₂: film screening and discussion, IG₃: film creation).

Table 4. Average and standard variation for students of the intervention subgroup (IG₁-screening) for every variable

	1 st measurement		2 nd measurement		3 rd measurement	
	Average	SD	Average	SD	Average	SD
General Attitude	3.23	.40	3.70	.54	4.02	.44
Attitude towards Behaviour	4.84	.60	5.72	.94	5.86	.85
Intention	5.93	1.00	5.88	.99	5.98	.80
Perceived behaviour control	5.44	1.11	5.39	1.20	5.80	.89
Moral Obligation	5.06	1.36	5.35	1.22	5.37	1.21
Important others	6.31	.74	6.31	.77	6.35	.59
Information	4.74	1.25	5.08	1.16	5.23	1.08
Choice	9.94	1.17	9.95	1.31	10.34	.82

For the IG₁, there is an improvement in post-intervention positive attitudes and an increase in this improvement in the retention measurement, since most questionnaire's subclasses show an increased positive trend from the pre-intervention measure period up to the retention measurement period. However, these variations were not statistically significant for any of the variables included in the questionnaire.

Table 5. Average and standard variation for students of the experimental subgroup (IG₂-screening and discussion) for every variable

	1 st measurement		2 nd measurement		3 rd measurement	
	Average	SD	Average	SD	Average	SD
General Attitude	3.59	.46	3.68	.51	3.63	.51
Attitude towards Behaviour	5.59	1.00	5.67	1.05	5.86	1.04
Intention	6.11	.96	6.04	1.05	6.05	1.04
Perceived behaviour control	5.13	1.21	5.33	1.14	5.37	1.11
Moral Obligation	5.02	1.30	5.20	1.35	5.27	1.32
Important others	6.24	.92	6.24	.88	6.12	1.02
Information	4.90	1.17	5.21	1.15	5.23	1.22
Choice	9.75	1.50	9.97	1.49	9.75	1.66

In the IG2 (table 5) there is an improvement in post-intervention attitude in most mean values, while there was no sustained improvement in the retention measure. The only statistically significant difference concerns "Behavioural Choice", ($F_{(2, 595)} = 3,517$, $p = 0,032$, partial $\eta^2 = 0,043$).

Table 6. Average and standard variation for students of the experimental subgroup (IG3-shooting) for every variable

	1 st measurement		2 nd measurement		3 rd measurement	
	Average	SD	Average	SD	Average	SD
General Attitude	3.43	.38	3.82	.69	4.12	.48
Attitude towards Behaviour	5.15	.57	5.64	1.22	5.80	1.02
Intention	5.77	.98	6.00	.78	5.88	1.05
Perceived behaviour control	5.65	.89	5.89	.88	5.92	.99
Moral Obligation	4.39	1.31	5.45	1.35	5.39	1.25
Important others	6.15	.91	5.86	1.15	6.33	.71
Information	4.88	1.07	4.74	1.08	5.47	.94
Choice	9.91	1.41	9.98	1.19	10.30	.65

Finally, in IG₃ (table 6) there was an increase in average value for most constructs. This increase was also found to remain in the retention results. As shown in Table 6, statistically significant differences were observed in "General Attitude" ($F_{(2, 595)} = 81,683$, $p = 0,000$, partial $\eta^2 = 0,292$), "Attitude" ($F_{(2, 595)} = 60,856$, $p = 0,000$, partial $\eta^2 = 0,235$), "Moral obligation" ($F_{(2, 595)} = 4,532$, $p = 0,004$, partial $\eta^2 = 0,043$), "Information" ($F_{(2, 595)} = 9,342$, $p = 0,000$, partial $\eta^2 = 0,045$) and "Behavioural Choice" ($F_{(2, 595)} = 4,397$, $p = 0,005$, partial $\eta^2 = 0,022$).

To summarize the data, it is noted that the third intervention subgroup, which had the responsibility to create a film, did not show a statistically significant increase in all averages, in the measurement carried out after the intervention program, however in the last measurement it exceeded the original levels in most of the cases.

5 Discussion

The purpose of the study was to examine the impact of an intervention program which was based on cinema as an educational tool on primary school students with regard to people with special educational needs and disabilities. Through the data presented during the statistical analysis of the study, the critical and extremely important role of the cinema in raising pupils' awareness of the disabled is highlighted.

The evidence to support this finding comes from the comparison of the control group and the intervention group. This comparison revealed that the students of IG who have participated in cinema literacy programs have improved their attitudes towards pupils with special educational needs and disabilities, while no corresponding results have been obtained for the CG. These results are difficult to compare directly with those of other studies, as no such studies have been found in previous literature. They can, however, be reinforced by research results that studied the effect of cinema on students' attitudes on a range of social issues (Owell, 2011; Juni, 2014; Mahmood, 2013; Sobers, 2008).

The effect of the intervention program, that is its impact on pupils' attitudes towards people with disabilities, can be attributed to the very nature of the medium as cinema is

an art that combines speech, image and sound, involving at the same time other arts such as music. As an art, cinema has the ability to invest its products emotionally and by using effects, editing and soundtracks to influence the emotional and cognitive load of viewers. This film education program has influenced viewers' attitudes probably because it has given young viewers - through targeted processing and discussion - the ability to "read behind cinematic scenes" and decode the hidden messages of the films used in the program, which is where the true meaning of the film stems from. Compared to simple audiovisual products on disability, the corresponding cinematographic films seem to be superior since they have stronger artistic criteria and high aesthetic norms which eventually contribute to the cultural adulthood of the underage viewer.

This study also examined the impact of three different film education programs on students' attitudes towards people with disabilities. In the first IG the program was based only on movie screening, in the second IG the film projection was accompanied by a debate, while in the third IG the students created a short film about disability. From the results, it was found that the program that was followed by the third IG (film creation) was the most effective in raising pupils' awareness about the disabled. Programs with only film screening or screening and discussion seem to have had a limited impact on students' attitudes, despite the fact that surveys have shown that when selecting this method of processing film products (Hager, 2015; Mcleary, 2014; Smithikrai, 2016), the results towards changing attitudes are very satisfactory. A possible interpretation of this result may be related to the particular characteristics of these programs (film content and film analysis and interpretation), but also to the particular characteristics of the pupils who will watch the films (gender, age, previous experience with people with disabilities, etc.) as the success or failure of these programs is associated with such features (Kourea & Ftiaka, 2003). The particular characteristics of the specific intervention program, such as its two-month duration, the short films used, the way of discussing these films, the composition of the school classes involved in the program, may be factors influencing the results and thus are possibly responsible for the limited improvement of the positive attitudes of the students of the first and second intervention groups (screening - screening and discussion of the films).

Regarding the intervention program in which students created a short film on disability, the results showed that not only did the students raise awareness on disability, but the students also maintained this attitude during the follow up measurement (two months after the intervention program). Specifically, statistically significant variations were observed in the variables "general attitude", "attitude towards behavior", "moral obligation", "information" and "choice of behavior".

The above-mentioned findings, which highlight the important benefits of the utilization of cinema in the educational process, are interpreted on the basis of the theory of experiential learning as students who created a short film about disability were more sensitized, interacting with their classmates with special educational needs and disability, and better understand the issues of disability and the rights of people with disabilities.

In summary, the results of this study seem to be in line with those of other studies that reveal the crucial role of media (and cinema) in shaping public attitudes towards disability (Jones, Sorell & Jones, 1981; McLoughlin & Trammell, 1979) and propose the implementation of intervention programs in education with a view to developing positive attitudes towards inclusive education and people with disabilities (Ferguson, 1999).

These results are consistent with and interpreted with Theory of Planned Behaviour, according to which the intention of behaviour is determined by three factors: attitude

towards behaviour, subjective norm (important others), and perceived control. As demonstrated by the study, the students who participated in the intervention program with a cinema tool have improved the "general attitudes" and "attitudes towards behaviour" variables, and thus their intention to show specific behaviour towards people with special educational needs and disability.

Moreover, the impact of this intervention program on students' attitudes can be explained by the theory of Social Identity and Bandura's socio-cognitive learning theory. The selection of the particular short film intervention program was based on the findings of the specific theories, namely that a person's social identity consists of those aspects of his/her self-image that come from the social groups in which (s)he or she considers the individual to belong to. Thus, a student tends to attach particular importance to the behaviours and attitudes of the groups he belongs to (his/her peers) and is expected to be more easily influenced if the short films to be used were created by members of that group. According to the above-mentioned theories, individuals are more likely to adopt behaviour if the model (in this case, the peer filmmakers and the leading actors) is similar to the viewer (in this case, the peer viewers of the films).

The positive effects of the intervention program on student attitudes may also be related to the very nature of short films. Short film productions work like the poems against the great literary texts: they contain intense, lustrous speech and multifaceted, are densely and multileveled and therefore open to a variety of interpretations. The above elements, as well as the particular characteristics of the educational system (timetable, curriculum), make it necessary to select short films as they can be included in the timetable without causing unmanageable loss of teaching time.

From the above, it can be concluded that intervention programs with a cinema tool can positively affect viewers' attitudes towards people with special educational needs and disabilities. Future surveys could assess the impact of longer-term and different content intervention programs as research links their effectiveness to their specific characteristics. As the question of the methodology used in the implementation of intervention programs is crucial for their final results, it is proposed to evaluate all these methods to highlight the most effective. Useful conclusions could also be drawn from the extension of such programs to younger ages, as the bibliography demonstrates the need for timely implementation of intervention programs that have an impact on attitudes of young viewers to various social issues.

6 Conclusion

For the promotion and success of inclusive education, a critical factor is the formation of positive attitudes of pupils without disabilities towards pupils with disabilities. The implementation of intervention programs can help in this direction and cinema is an ideal educational tool as it is attractive to students. The use of short films on disability is recommended because, due to their short duration, they can easily and inexpensively be integrated to the curriculum of every class. The nature of the cinematographic medium (connections to many cognitive subjects such as Language, History, Physics, Music, Visual Arts, Computer Science, etc.) allows its interdisciplinary use in the learning process. The inclusion of cinema in the daily school routine can be promoted in order to influence students' attitudes towards a range of issues, but also to foster their audiovisual literacy and critical thinking. Surveys show that cinema is an attractive learning environment and under certain conditions it can improve both student performance and awareness of a range of social key issues. Finally, it is necessary to promote in the public educational dialogue issues related to the training of teachers in the field of media education and the creation of supportive educational material for all levels of education.

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