Media competence in children aged 9 to 12 in Brazilian settings

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Abstract

This paper presents the findings of the research "Media Competences in Brazilian and Euro-American Settings", which aimed at analyzing media competence in children aged 9 to 12 to enable researchers, educators and policy-makers to promote their development. The study was carried out by the Brazilian team of the Euro-American Inter-University Research Network on Media Literacy for Citizenship (ALFAMED) and the data was collected through questionnaires applied in

five Brazilian regions. Results indicate that media competence, particularly regarding interaction processes and ideology and values dimensions, is still underdeveloped, which indicates the urgent need for teachers and experts' attention.
Keywords: Media competence. Media literacy. Alfamed. Media Education. Communication and Education.

Introduction

The transformations in social relations mediated by digital technology have impacted cultures and socioeconomic relationships. In this context, discussions about the role played by the media today are, among other aspects, based on the understanding of youth's performance in digital social networks. If, on the one hand, today's children and young people are born in the digital and media world, on the other hand, the so-called "analfanauts" who, despite presenting reasonable to advanced digital performance, lack the development and mobilization of competencies that allow them to "determine the validity, relevance and veracity of the information they consume, generate, spread and/or share" (ROMERO RODRIGUEZ *et al.* , 2016, p. 13), which raises questions about what this characteristic represents.

In order to contribute to broaden the understanding of these processes, the Brazilian team of the Alfamed[1] Network (Euro-American Inter-University Research Network on Media Literacy for Citizenship), which includes the Federal University of Juiz de Fora (UFJF - coordination), Ponta Grossa State University (UEPG - vice-coordination), University of Brasília (UNB), Federal University of Santa Catarina (UFSC), Federal University of Triângulo Mineiro (UFTM) and Sorocaba University (UNISO), developed the research "Media Competence in Brazilian and Euro-American Settings" (2015-2019). The objective of the research was to map out media competence levels in different segments: children aged 9 to 12, young people aged 14 to 16, university students aged 17 to 21, as well as university lecturers and communication professionals in order to propose training actions and strategies for the development of public policies[2].

The theoretical scope of the research is based on the concept of media competence elaborated by Ferrés (2007) and Ferrés and Piscitelli (2012) and is presented as an expansion of the research previously carried out in Spain (FERRÉS *et al.*, 2011). Under the coordination of UFJF, each university contributed to the research in the form of subprojects that included at least two segments, according to the characteristics of the research groups involved. Based

1 Red Alfamed is composed of 19 Ibero-American and European countries (www.alfamed.org).

2 The research was funded by CNPQ - National Council for Scientific and Technological Development (Edict MCTI/CNPq/MEC/CAPES No. 14/2014 – Human Sciences and Applied Social Sciences (Process No. 449573/2014-1), FAPEMIG - Minas Gerais State Research Support Foundation 01/1/201/2014 2015 - Universal Call (All scientific fields) 2015 - APQ CHE Process 002824-15), University without Borders Program of the Secretariat of Science and Technology of the State of Paraná, Federal University of Juiz de Fora and the preparation of this paper is funded by a scholarship from Fundación Carolina through its Visiting Lecturer program.

on the results obtained, the researchers elaborated proposals for training actions to develop media competence.

In this paper, we present the results of the 502 questionnaires applied to the segment of children aged 9 to 12 by the universities UFJF, UEPG, UnB, UFSC and UNISO. This work focuses on the analysis of media competence levels of children in each of the six dimensions proposed by Ferrés and Piscitelli (2012), which were cross-checked with data from the profile of participants, such as age group, gender, type of school and training in audiovisual and digital communication, in order to enable a reflection on the needs identified and set out recommendations for the development of training actions for teachers and students alike and foster strategies for public policies development.

Media literacy and competence development

Given the importance of digital technologies in our lives, which can be synthesized in the expression "onlife" (FLORIDI, 2017) to define our daily activities, we still need a modern conceptual basis that helps us understand their impacts on society and the challenges of living in a hyperconnected era, as the author states. In this sense, media and cultural practices related to the production and sharing of content between children and young people challenge us to understand and problematize them from a critical perspective.

Over a decade ago, Martin-Barbero (2008, p. 20) pointed out that technology is "one of the most powerful metaphors for understanding the fabric – networks and interfaces – of building subjectivity". However, when emphasizing technology as a culture, it is important to understand that, in the context of digital culture, technologies are not "mere instruments" to assist and/or contribute to certain practices, but "structuring foundations of practices", as Pretto (2015) argues. For the author, digital technologies are elements of a "new writing of the contemporary" (PRETTO, 2019, p. 2).

In these writings, computers and cellphones are not neutral because they carry implicit values and modes of use. And despite a certain degree of flexibility, notion of participation, experimentation and appropriation by children and young people, the emphasis on a critical and reflective use of digital technologies requires mediation. Thus, in order to promote this mediation, action is necessary to develop media competence.

Since 1982, with the Grünwald Declaration, UNESCO has been pointing out the importance of studies in communication and education, based on early childhood education with the purpose of "developing the knowledge, skills and attitudes which will encourage the growth of critical awareness and, consequently, of greater competence among the users of electronic and print media " (UNESCO, 1982, p. 2), indicating the need for these studies to contribute to the development of critical analysis capacity and creative expression. The declarations that ensued further fostered these reflections, among them the Declaration of Paris can be highlighted, which considers that media education should "develop skills for the critical analysis of messages, whether in news or entertainment, in order to strengthen

the capacities of autonomous individuals and active users"; and strengthen the links between media education and cultural diversity and respect for human rights, thus contributing to the promotion of social responsibility (UNESCO, 2007, p. 1).

Media literacy is defined as the ability to access, analyze, and evaluate the power of images, sounds and messages, as well as communicate critically and creatively through the available media. As one of the pioneers in this field indicates, "The promise of media literacy, surely, is that it can form part of a strategy to reposition the media user - from passive to active, from recipient to participant, from consumer to citizen" (LIVINGSTONE, 2004, p. 20). Thus, media literacy would constitute the basis for training active and critical citizenship. Authors such as Wilson *et al*. (2013), Pereira, Pinto and Moura (2015) and Buckingham (2019) have also developed studies based on this concept.

There is a consensus that media literacy needs to be present in schools as a condition for expanding important competencies for the development of countries. Considered as an essential condition for personal expression and coexistence of pluralism of ideas, contributing to "the strengthening of values such as diversity, tolerance, transparency, equity and dialogue" (EU, 2009, p. L227/10).

Driven by UNESCO and the European Union, several studies have been developed in the context of media competence as a way of addressing issues generated by the inset of media in society and consequent transformations. According to the recommendations of the European Union, "competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development." In terms of responsibility and autonomy (EU, 2008, p. 111-114), communicative competence is today connected with the media environment and is considered one of the pillars of citizenship. Therefore, media competence linked to communication and digital competencies (EU, 2018) need to be aligned with skills and abilities compatible with ethical attitudes and values. In this line, Delgado-Ponce and Pérez-Rodrigues (2018, p. 14-15), define media competence as:

> [...] an interrelated and complex set of knowledge, skills and attitudes that allow us to develop effectively in the media landscape, both to access, analyze and evaluate messages as an important part of our contemporary culture, as a media component [...] managed by digital technologies in constant evolution.

Thus, media competence is related to a lucid reading of the present time, with the guarantee of responsible freedom of expression, the production and enjoyment of critical, engaged and citizen information (DELGADO-PONCE; PÉREZ-RODRIGUES, 2018).

Ferrés (2007) and Ferrés and Piscitelli (2012) elaborate the concept of media competence from a methodological proposal to study the scopes of critical analysis and creative production of media content. This is defined through the following dimensions: Technology, Language, Interaction Processes, Production and Dissemination Processes,

Ideology and Values, and Aesthetics. These dimensions are interdependent and understood both in the modes of interpretation and expression of the public in relation to media content. A brief description of each of these dimensions' scope is presented below:

Table 1 – Media competence

Dimension	Description
Technology	Ability to effectively use media/ICT, adapt the technology to the purposes previously established by the user; know and integrate technological innovations, as well as elaborate and manipulate images, sounds, etc.
Language	Ability to properly interpret the codes of a message; evaluate the meaning of content and different representation systems; express oneself according to different codes and representation systems, depending on the context and message produced or transmitted.
Interaction processes	Ability to evaluate one's own media habits; recognize and appreciate the emotions and values in the messages as well as the ability to critically interpret media content, and collaboratively interact in the platforms facilitated by social networks.
Production and dissemination processes	Be aware of production procedures, programming, and dissemination of media content; differentiate between individual and collective productions; public and corporate, etc.; understand and use production systems, content programming and dissemination, collaborate in the development of multimedia or multimodal products. Be aware of copyright and responsible content production, respecting intellectual property rights.
Ideology and values	Be aware of legislation that protects media users and consumers, produce and interpret media messages in a responsible, democratic and autonomous way, detecting underlying intentions, rights and interests of content; ability to use ICT in a responsible and democratic way, favoring the promotion of a social environment.
Aesthetics	It deals with sensitivity and attention to the formal aspects of media products, from a creative perspective and governed by good taste; ability to use and interpret the means following standards of aesthetic quality, in a creative and original way.

Source: prepared by the authors based on Ferrés and Piscitelli (2012).

Research Methodology

The methodology used started from a quali-quantitative approach. Due to the nature of social sciences, the research approaches adopted in this field have been mostly qualitative,

aiming at understanding the processes of signification, in particular from the perspective of the participants (SCHNEIDER; FUJII; CORAZZA, 2017). However, numerical and quantifiable data also contribute significantly to the understanding of social phenomena. Thus, the articulation of quantitative and qualitative data helps to understand research situations, alerting to the need for "researcher's reflection effort to give meaning to the material raised and analyzed" (GATTI, 2004, p. 13).

Regarding the objectives, the research is exploratory-descriptive with data collected through questionnaires (HERNÁNDEZ SAMPIERI; FERNÁNDEZ-COLLADO; BAPTISTA-LUCIO, 2013, GIL, 2008) that aimed to address a subject that is understudied in Brazil: the levels of media competence in each of its dimensions.

The research consisted of different articulated and complementary stages. The initial stage aimed to train the teams in each university. The studies included texts on media literacy and media competence, as well as research undertaken in Spain on this topic. The second stage included the elaboration of data collection instruments (questionnaires) for the different segments of the research, which was quite time-consuming as it considered intercultural specificities inherent to Portuguese and Spanish. The third stage included the application of the questionnaires and data validation, which was later carried out at the University of Huelva. The fourth stage established training actions based on the analysis of the results.

For the application of the questionnaires, schools from each region were contacted and procedures related to the free and informed consent of the students and their guardians were undertaken. The students had access to the questionnaire through an online application developed by the Spanish team. Most of the schools made computer laboratories available for the research. In the next step, the data were statistically treated, and the results were validated. At first, the data referring to each dimension were analyzed and organized in relation to the levels of media competence, distributed through values corresponding to the following categories: basic, basic/intermediate and advanced. We also cross-checked the data according to gender, age, type of school and training in order to verify the variations that occurred in each of these categories.

Considering the international protocol which served as a directive for the research, efforts were made to properly contemplate sociocultural diversities and singularities of different empirical fields of this study. This aspect was considered in the data analysis but, nonetheless, the difficulty and complexity in this type of research are relevant, in particular with regards to the context of certain questions of the questionnaire.

Composed of 24 questions, the questionnaire covered the following categories: profile of respondents (7) and the dimensions of media competence: Technology (3), Language (3), Interaction Process (3), Production and Dissemination Processes (2), Ideology and Values (3), Aesthetics (3). The questionnaire included multiple choice questions with one or more possible answers. The questions were organized in a spreadsheet and later systematized according to the following table:

Table 2 – Distribution of question per category

Category	Questions
Profile	P1, P2, P3, P3.1, P4, P4.1, P5
Technology Dimension	P14, P15, P22
Language Dimension	P8, P11, P12
Interaction Processes Dimension	P13, P17, P20
Production and Dissemination Processes Dimension	P19, P23
Ideology and Values Dimension	P7, P16, P18
Aesthetics Dimension	P6, P9, P10

Source: prepared by the authors.

The application was carried out in 2016, with the participation of students from 13 elementary schools in the following regions: three schools from the Federal District, two from Minas Gerais, two from Paraná, two from Santa Catarina and four from São Paulo, selected from private, public and private schools with public funding, totaling 510 questionnaires answered, of which 502 were considered valid according to the following table:

Table 3 - Distribution of students by regions:

Region	Participants
Federal District	121
Minas Gerais	104
Paraná	101
Santa Catarina	124
Sao Paulo	52
Total	502

Source: prepared by the authors.

In order to organize the data[3], and obtain consistent information, a standardization of variables was made by the most frequent name, this action was necessary because respondents inserted different forms for the same school or state, i.e. MG, MINAS GERAIS or Minas, for Minas Gerais, and so on. After debugging the database, the open source and free distribution statistical software R (https://www.r-project.org/) was used to generate the first results. Next, the SPSS software, version 22, was used to refine the data, which facilitated the reading of competence levels and the crossing of these levels according to the profile variables of the respondents.

3 The data were processed with the help of statisticians: Daniel Gustavo Moreira (Initial Treatment) and José Ricardo Favoretto (Detailed Treatment) and scientific initiation scholar Vinicius Guida.

Analysis of results

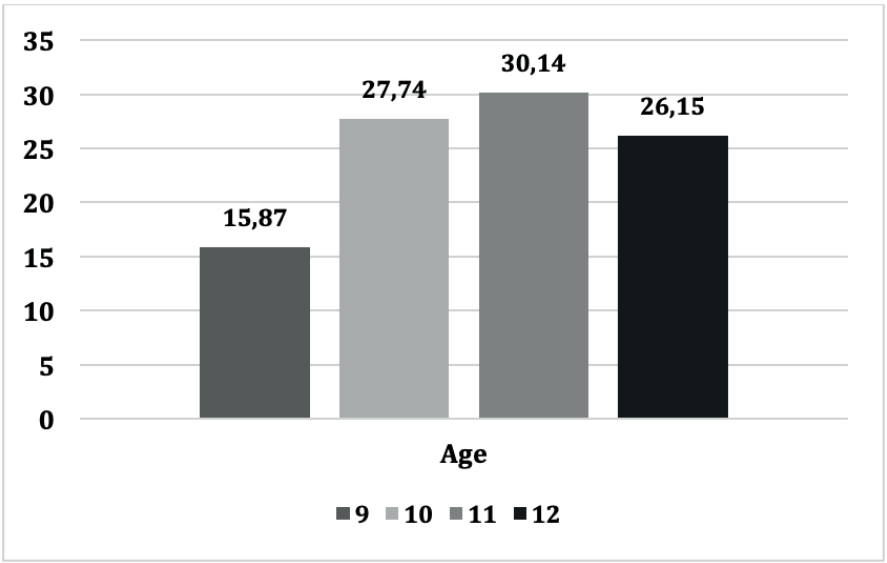
Based on the results found, this article presents the profile of the respondents and the analysis of the levels of media competence in each of the six dimensions. Subsequently, we cross-referenced the analysis with data related to the profile of children, such as age group, gender, type of school and training in audiovisual communication.

Profile of respondents

The children and adolescents who participated in the research studied in public, private, and private schools with public funding, located in rural, urban, different city center and periphery contexts, and the choice of schools was motivated by the partnership projects that each team had already developed in their universities. In this sense, the family and financial profile of the students was very diverse and involved small rural owners, service providers, self-employed, workers, shopkeepers, civil servants, entrepreneurs (SILVA; RAM; MEYER, 2019, p. 38).

Regarding the place of origin of the respondents, the questionnaire was applied in the Federal District (24.15%); Santa Catarina (24.55%); Minas Gerais (20.76%): Paraná (20.16%) and São Paulo (10.38%). There was a higher number of male participants (55.29%), compared to females (44.71%). Regarding age groups, 15.97% of the students were 9 years old; 27.74% consisted of 10-year-old children; 30.14% of the respondents were 11 and 26.15% were 12 years old, respectively.

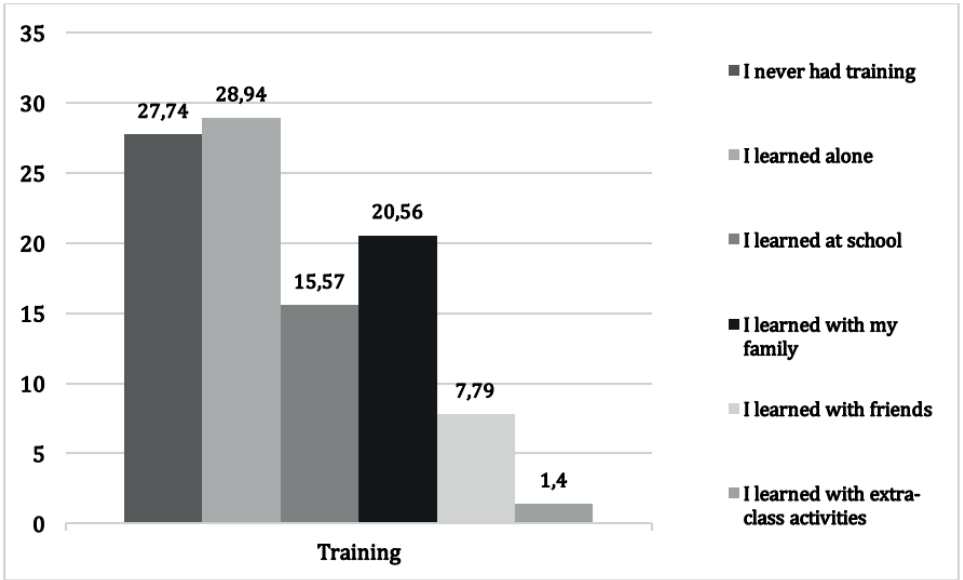
Chart 1 - Age of Respondents



Source: prepared by the authors.

Regarding training in audiovisual and digital communication (to understand, use and produce audiovisual content, such as films, videos, etc.), the students pointed out: "I never had training" (27.74%); "I learned alone" (28.94%); "I learned at school" (15.57%); "I learned with my family" (20.56%); "I learned with my friends" (7.79%); "I learned with extra-class activities" (1.40%), as can be seen in Chart 2.

Chart 2 – Audiovisual and Communication Training



Source: prepared by the authors.

Chart 2 shows that, for these children, the educational institution had little role in media learning, indicating that there is a space that can be occupied by the school in expanding media competence in this segment. This is also very important to justify the need for public policies for teacher training in the field of digital culture.

There are also other data on the diversity of consumption and media practices of children and adolescents who participated in the research and who cross the different dimensions of the competencies. It is worth making a brief emphasis on the uses of the internet since most children point out that they have never received training and have learned on their own.

The most frequent activities mentioned by the students were: watching videos (95.01%), playing (91.42%), watching movies and TV series (83.03%), searching for information (82.83%), listening to music (82.63%). Less than half mention: posting videos on YouTube or other channels (47.31%), use email (43.51%), and read news (41.92%), as pointed out by Silva, Carneiro and Meyer (2019, p. 45). These data dialogue with a survey by CETIC/CGI (NÚCLEO DE INFORMAÇÃO E COORDENAÇÃO DO

PONTO BR, 2018a) and *TIC Kids Online Brasil 2017* (NÚCLEO DE INFORMAÇÃO E COORDENAÇÃO DO PONTO BR, 2018b), highlighting that 85% of children and adolescents between 9 and 17 years old were internet users and that the consumption of online news among them was 51%.

Although these data demonstrate a dimension of digital inclusion, the CETIC/CGI (NÚCLEO DE INFORMAÇÃO E COORDENAÇÃO DO PONTO BR, 2018a) survey also highlights a certain regional and socioeconomic disparity in relation to network access and use: in urban areas (90%) and rural (63%); in the southeast (93%) and north (68%); class A (92%), B (91%), C (76%), decreasing to 48% in classes DE, with a tendency to access only through cellphones with Wi-Fi connections. In this context, it is worth remembering that if in the first decade of the 21st century, the map of digital exclusion/inclusion in Brazil indicated that only 33% of households were connected to the network (NERI, 2012), an IBGE survey (2018) shows that approximately 25% of the Brazilian population is still not connected to the internet.

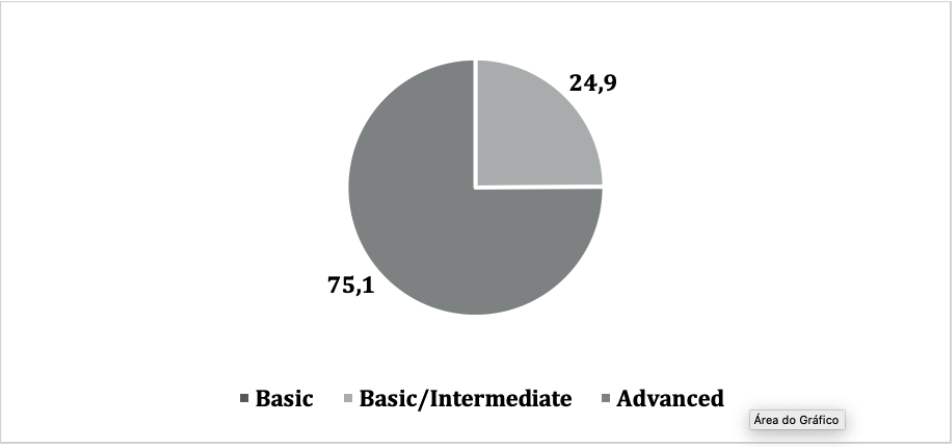
The levels of media competence in relation to the dimensions

At this stage of the research, the intention was to determine the levels of media competence obtained by the students in each dimension, remembering that the purpose is not to present a fixed classification, but to establish parameters for educational actions that would promote improvement in each of the media competence dimensions. In this sense, the general levels of each dimension were identified in terms of 'Basic' (level 1), which corresponds to the most rudimentary knowledge, performance and skills, 'Basic/Intermediate' (level 2 and 3), which corresponds to having knowledge, performance and initial skills although still not fully consolidated, and 'Advanced' (level 4) corresponding to having knowledge, performance and skills that are more consolidated and autonomous in their interactions with the media. Each question was categorized based on these levels and the results grouped into each of the dimensions as indicated in Chart 2. These data were later crossed with elements of the students' profile, such as gender, age, type of school and training to handle media, and confronted with the advanced level in order to help understanding how they behaved in each category. This level was chosen because it represents the highest level of media competence achieved by the children in the questionnaire.

Technology Dimension

Regarding the Technology dimension, questions were asked about the knowledge of devices, internet uses and recognition of program interference in the manipulation of images. In this dimension, the values related to the lowest level of competence were insignificant, so the majority (75.1%) reached advanced level, as can be seen in Chart 3.

Chart 3 - Levels of Media Competence in the Technology Dimension



Source: prepared by the authors.

This was the dimension with the highest potential developed at advanced level, when related to the gender category, the percentages remained balanced: 74.6% at this level for girls and 75.5% for boys. This result shows that the gender issue does not interfere in the apprehension of this dimension.

Regarding age, it was possible to perceive a gradual growth of the advanced level according to age: 9 (66.3%), 10 (73.4%), 11 (76.8%) and 12 years old (80.3%), indicating that the accumulated experience helps in the apprehension of this dimension while providing a greater autonomy of use. In relation to the type of school attended, the highest percentage was registered in private schools (81.7%), followed by private schools with public funding (76.1%) and public schools (74%).

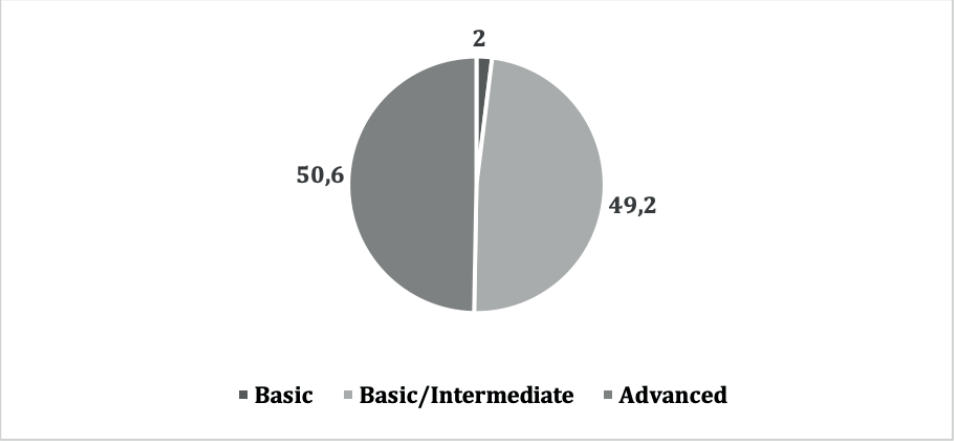
It is known that Brazilian public elementary schools offer less access to computers, tablets and diversified applications than private schools, which leads to question whether the type of access, as well as its frequency, are important conditions for the expansion of competence levels in this dimension. Finally, in relation to training, the most significant categories were “I learned alone” (84.1%) and “I never had training” (84.1%), followed by “I learned with extra-class activities” (71.4%), “I learned with friends” (70%), “I learned with my family” (68.9%) and “I learned at school” (65.4%). The data reinforce the idea that this dimension is related to experience, has greater potential for intuitive apprehension, and reveals aspects of the collaborative dimension of certain practices and learning in this context.

Language Dimension

Regarding the Language dimension, the questions referred to the recognition of the role of the elements of audiovisual language in the composition of the meanings of the media message. This dimension also presented a significant percentage of children at advanced

level (50.6%), and the variable gender indicated greater development in the female category (57.1%) than in the male category (45.3%).

Chart 4 - Levels of Media Competence in the Language Dimension



Source: prepared by the authors.

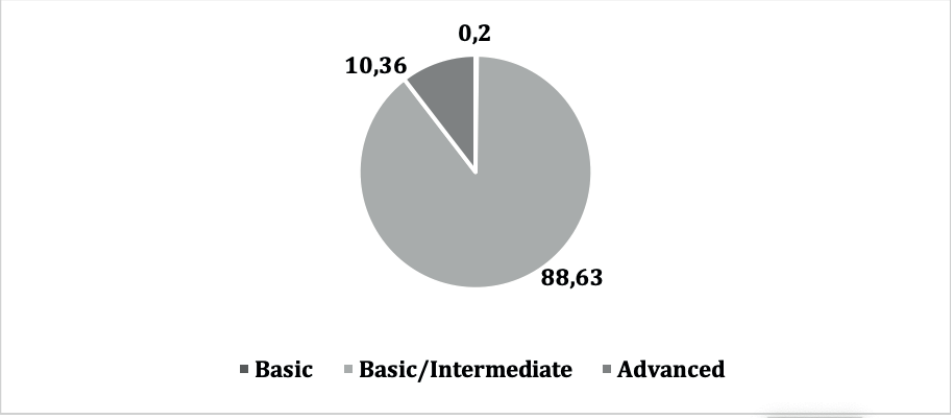
Progression by age group obtained in this dimension: 9 (43.8%), 10 (45.3%), 11 (52.3%) and 12 years old (58.3%). Regarding the type of school, the prevalence of private school was also confirmed (56.7%) followed by public school (50.3%) and private school with public funding (45.7%), indicating that, for this dimension, access to different devices is important, but not determinant, and it is necessary to investigate this relationship further.

In the training category, the data recorded for the advanced level were "I learned with my family" (58.3%), "I learned alone" (50.3%) and "I never had training" (49.6%), followed by "I learned with friends" (46.7%), "I learned at school" (46.2%) and "I learned with extra-class activities" (28.6%). The results obtained in this category raise questions on whether this dimension would be more related to social exchanges than to direct contact with the media.

Interaction Processes Dimension

The Interaction Processes dimension presented questions related to the audience and the conduct of participants in social networks. This dimension had the lowest percentage of children who reached the advanced level (10.36%) as can be seen in Chart 5. Regarding the gender category, the percentage of advanced level in boys (11.9%) showed a slight increase compared to girls (8.5%), indicating that further studies are needed to verify if this difference is maintained.

Chart 5 - Levels of Media Competence in the Interaction Processes Dimension



Source: prepared by the authors.

Regarding age, the following values were recorded at advanced level: 9 (7.5%), 10 (7.2%), 11 (12.6%) and 12 years old (12.9%), indicating that age is relevant in terms of acquisition of this dimension and showing that from 11 years on, the interaction of children in networks increases. Regarding the type of school, there was a prevalence of advanced level in public schools (11.1%) in comparison with the private sector with public funding (10.9 %) and private schools (5.0%), although they are small percentages compared to the whole dimension. The percentage of private school is practically half of the others, which indicates the need for further research to ascertain the reason for this difference.

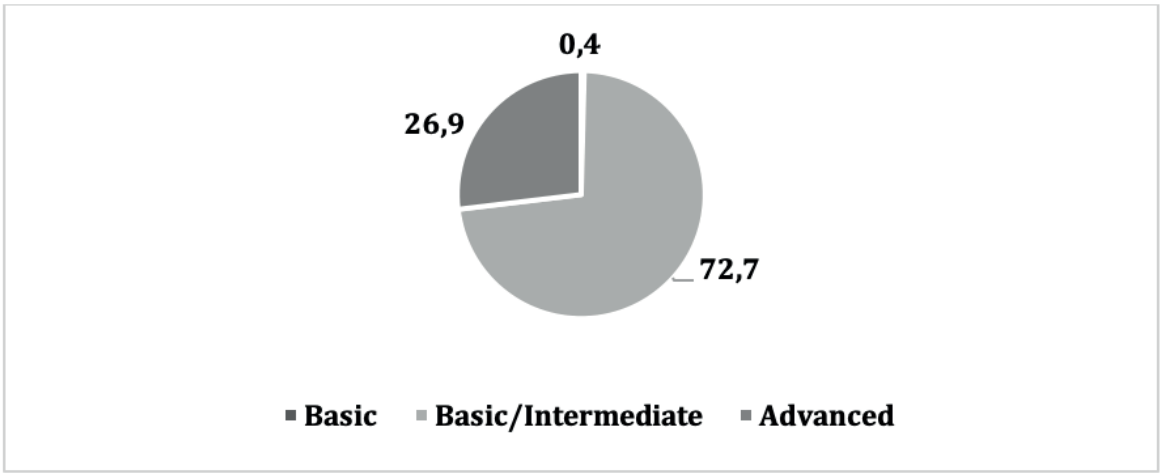
In the training category, the data recorded for the advanced level were “I learned alone” (15.9%), “I learned with my family” (9.7%), and “I never had training” (8.4%), followed by “I learned with friends” (6.7%), “I learned at school” (5.1%) and “I learned with extra-class activities” (0.0.%). The results obtained in this category indicate the need for further research to better understand the influence of the factors analyzed on the acquisition of a more advanced level in this dimension. However, data shows that less than 50% of children post videos on YouTube, use email or read news online.

Production and Dissemination Processes Dimension

The issues related to this dimension dealt with internet security measures and knowledge related to the functions of professionals working in the audiovisual area, as well as the stages involved in media production.

This dimension scored 26.9% at advanced level. Regarding the gender category, it presented a slight increase in the percentage of advanced level in girls (29.5%) compared to boys (24.8%), indicating that girls are slightly more active in terms of production and dissemination.

Chart 6 - Levels of Media Competence in Production and Dissemination Processes Dimension



Source: prepared by the authors.

Regarding age, the following values were recorded: 9 (15%), 10 (23.3%), 11 (29.1%) and 12 years old (36.4%), indicating that the age factor is relevant in terms of acquisition of this dimension. Regarding the type of school, the following percentages were recorded at advanced level: private school (40.0%), in public school (26.5%) and private school with public funding (13%), with particular emphasis to the highest performance in private school students, almost doubles that of public school.

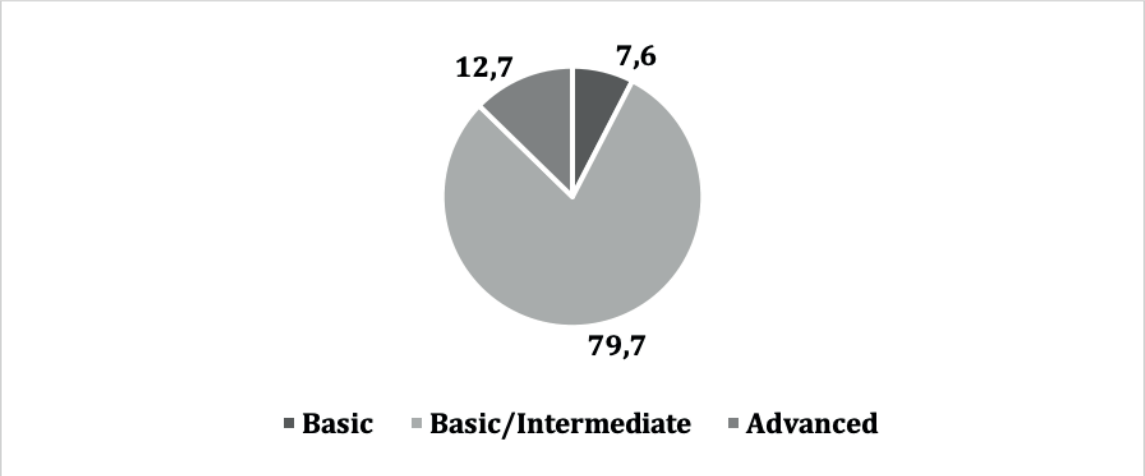
Regarding training, the data obtained for advanced level were “I learned alone” (37.9%), “I learned with extra-class activities” (28.6%), “I learned with friends” (26.7%), “I learned with my family” (25.2%), and “I never had training” (22.3%), followed by “I learned at school” (16.7%). Here it is noteworthy the fact that learning at school obtained the lowest advanced score and points us to clues as to the nature of the incentives given for the development of this dimension in a school environment. And, also, how formal, non-formal and informal knowledge is articulated in curricular proposals.

Ideology and Values Dimension

The Ideology and Values dimension presented questions related to the identification of the underlying intentions of advertising pieces, the criteria of choice on the internet and action initiatives that value citizenship in a virtual environment.

This dimension obtained the second lowest score at advanced level among the dimensions surveyed (12.7%). And it obtained the highest basic level score (7.6%), indicating the need to expand training actions in this dimension.

Chart 7 - Levels of Media Competence in the Ideology and Values Dimension



Source: prepared by the authors.

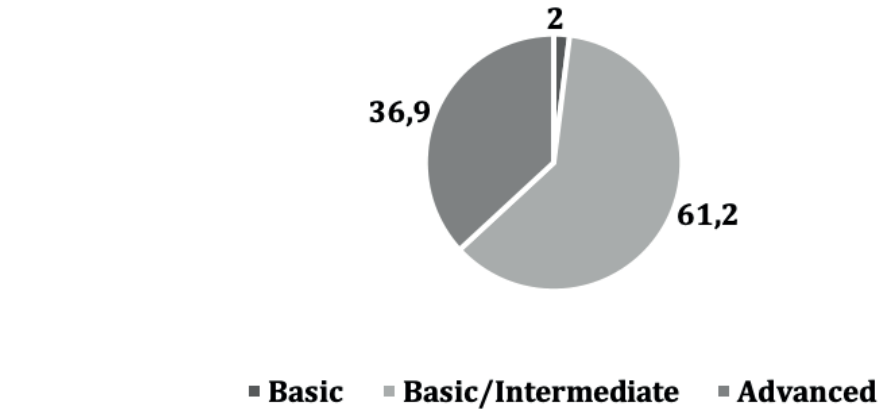
When comparing the gender category, advanced level scores had little variation among females (12.5%) and males (12.9%). Regarding age, the following percentages were obtained: 9 (15%), 10 (10.1%), 11 (15.9%) and 12 years old (10, 6%). There was an unexpected variation here that requires further investigation to identify its causes. When comparing the type of schools, the advanced level obtained a higher score in the private category (20%), followed by the public sector (12.1%) and private school with public funding (8.7%), indicating that private school attendance or the socioeconomic condition of the student can interfere in the expansion of the level of competence in this dimension.

Regarding training, the data obtained for the advanced level were “I learned with extra-class activities” (28.6%), “I learned alone” (20.7%), “I learned at school” (12.8%) “I learned with friends” (10%), “I learned with my family” (8.7%), and “I never had training” (7.2%). Despite the category “I learned alone” obtaining a high score of responses at advanced level, it seems to be better apprehended in contexts of social interaction or systematized knowledge.

Aesthetics Dimension

The Aesthetics dimension was presented through questions related to the recognition of strategies for aestheticizing of food products in advertising pieces. This dimension presented the third highest percentage at advanced level (36.9%), meaning that, despite being a complex dimension, the students demonstrated to have a relative intimacy with it.

Chart 8 - Levels of Media Competence in the Aesthetics Dimension



Source: prepared by the authors.

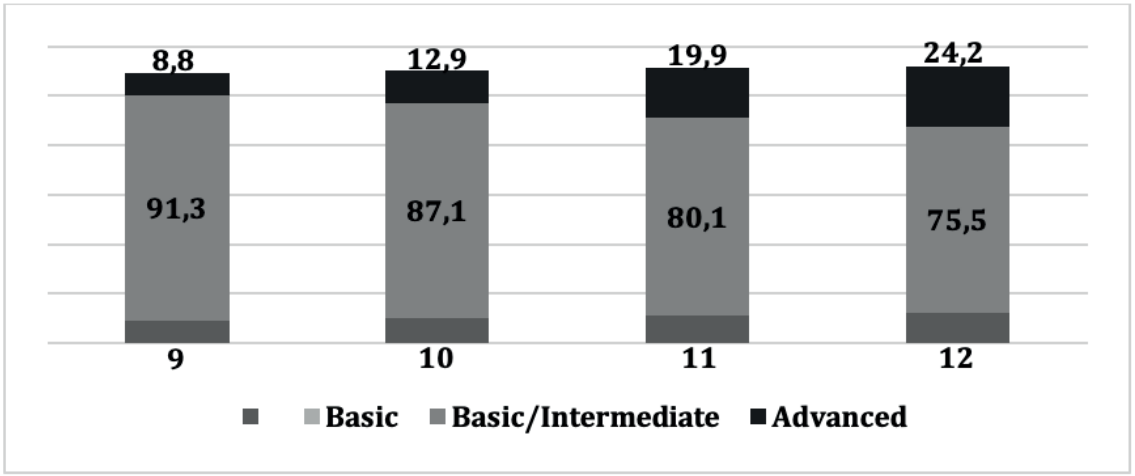
Regarding gender, females presented a higher percentage in this dimension (40.6%) than males (33.8%). Regarding age, progression over the years was maintained, thus obtaining the following record: 9 (32.5%), 10 (33.1%), 11 (36.4%) and 12 years old (43.9%). Considering the type of school, the results obtained were: public school (37.4%), private school (36.7%) and private school with public funding (32.6%), indicating that there is no significant prevalence among the categories covered.

Regarding training, the data obtained for advanced level were: “I learned with extra-class activities” (57.1%), “I learned with my friends” (43.3%), “I learned alone” (41.4%), “I never had training” (37.4%) “I learned with my family” (35%), and “I learned at school” (25.6%).

Dimensions in relation to profiles

Comparing all dimensions with the age profile, it is possible to observe that, with the exception of the Ideology and Values category, they demonstrated an increase in advanced level with the increase in age indicating that accumulated knowledge and experience help the development of media competence, as shown in Chart 9.

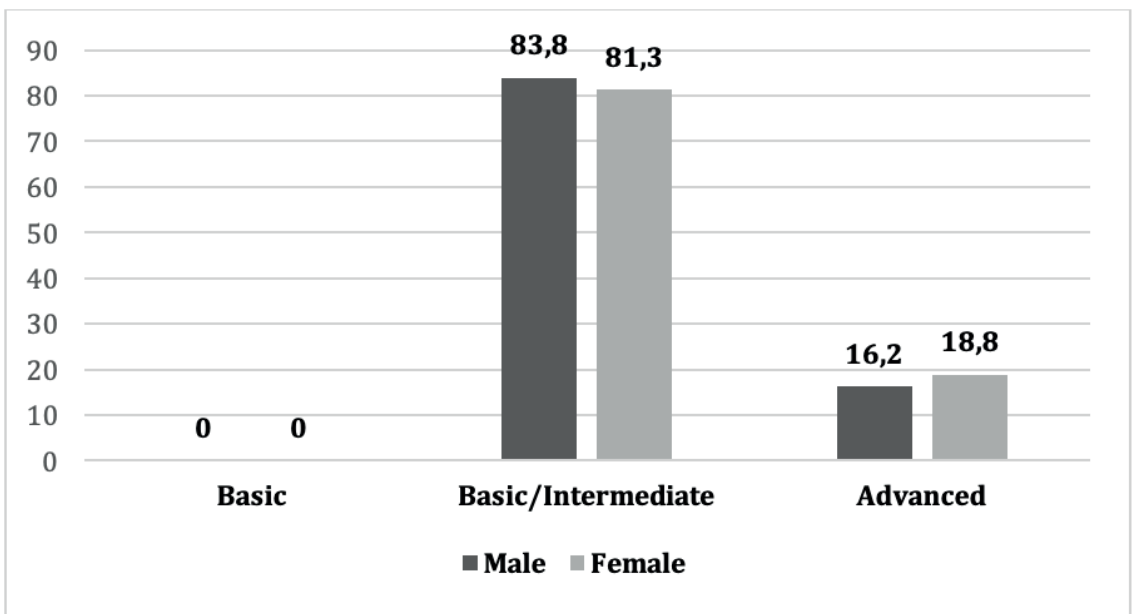
Chart 9 - Comparison between Dimensions and Age Group



Source: prepared by the authors.

Regarding gender, there was a predominance of girls in achieving advanced levels of competence, and the dimensions Technology (0.1%) and Ideology and Values (0.4%) presented an insignificant percentage difference in favor of boys, indicating that girls have a great potential for development in the media.

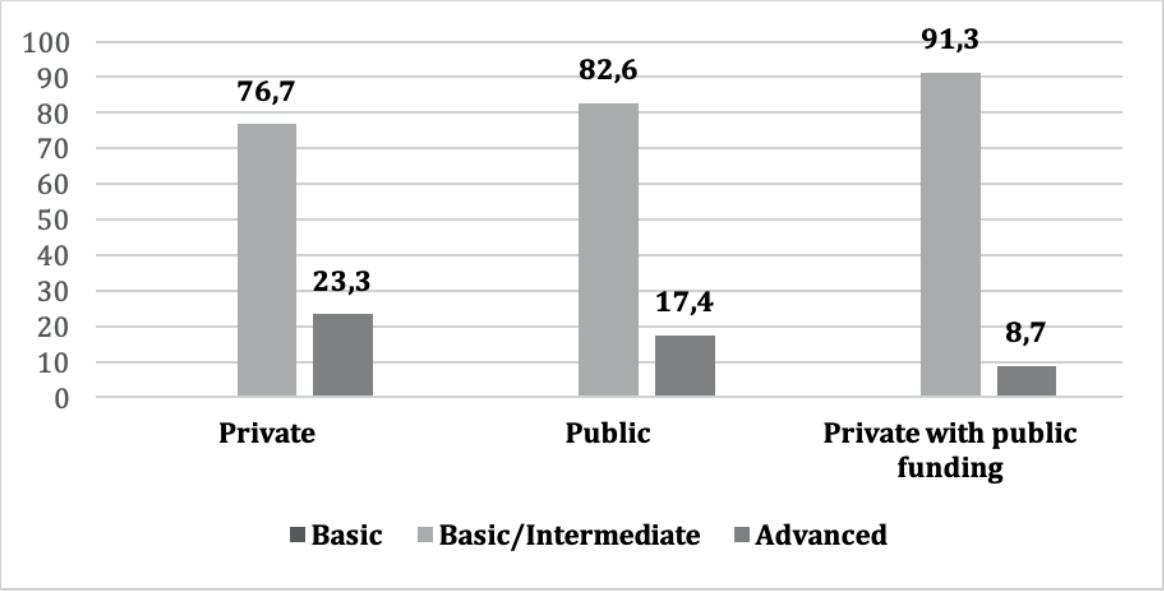
Chart 10 - Comparison between Dimensions and Gender



Source: prepared by the authors.

Regarding the type of school, there was a prevalence of private schools in relation to other types of school. A greater percentage difference in relation to the public school was significant only in the aesthetics and interaction processes dimensions, which indicates the need for investment in public policies in this area.

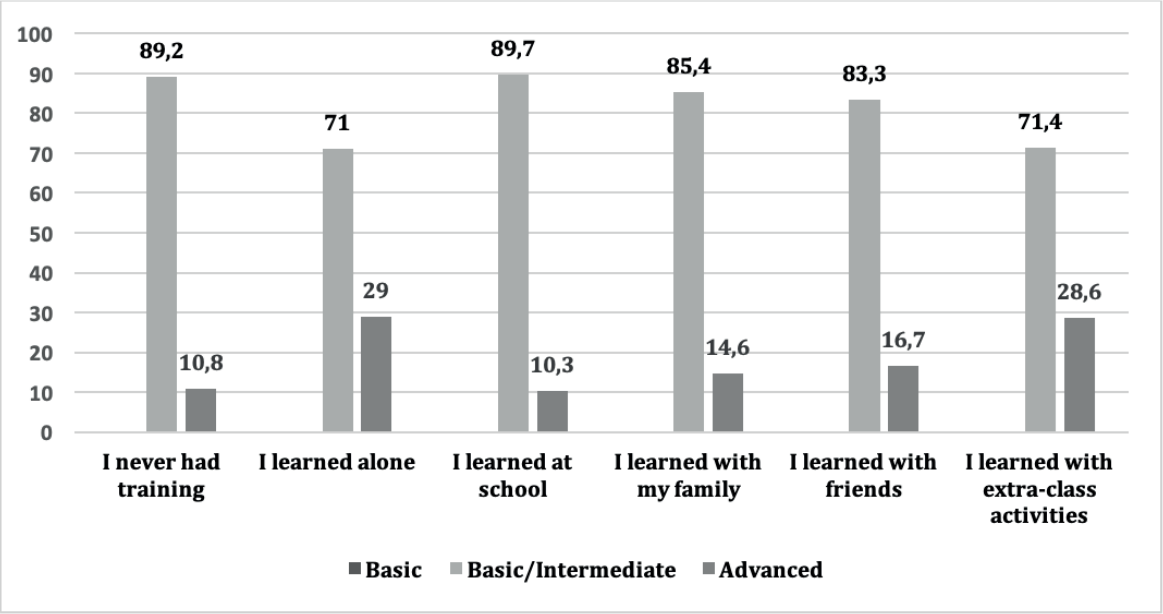
Chart 11 - Comparison between Dimensions and School Type



Source: prepared by the authors.

With regard to training in audiovisual and digital communication, there was a great fluctuation between the categories with the prevalence of “I learned alone”, followed by “I learned with extra-class activities”. It is worth noting that the option “I learned at school” obtained one of the lowest scores in all dimensions studied. This result indicates that the school needs to define an action plan that involves parents and teachers - and also to improve their skills - aimed at assisting the development of media competence, especially those that concern the understanding of the social function of the media and the ability to analyze and express critical thought through media.

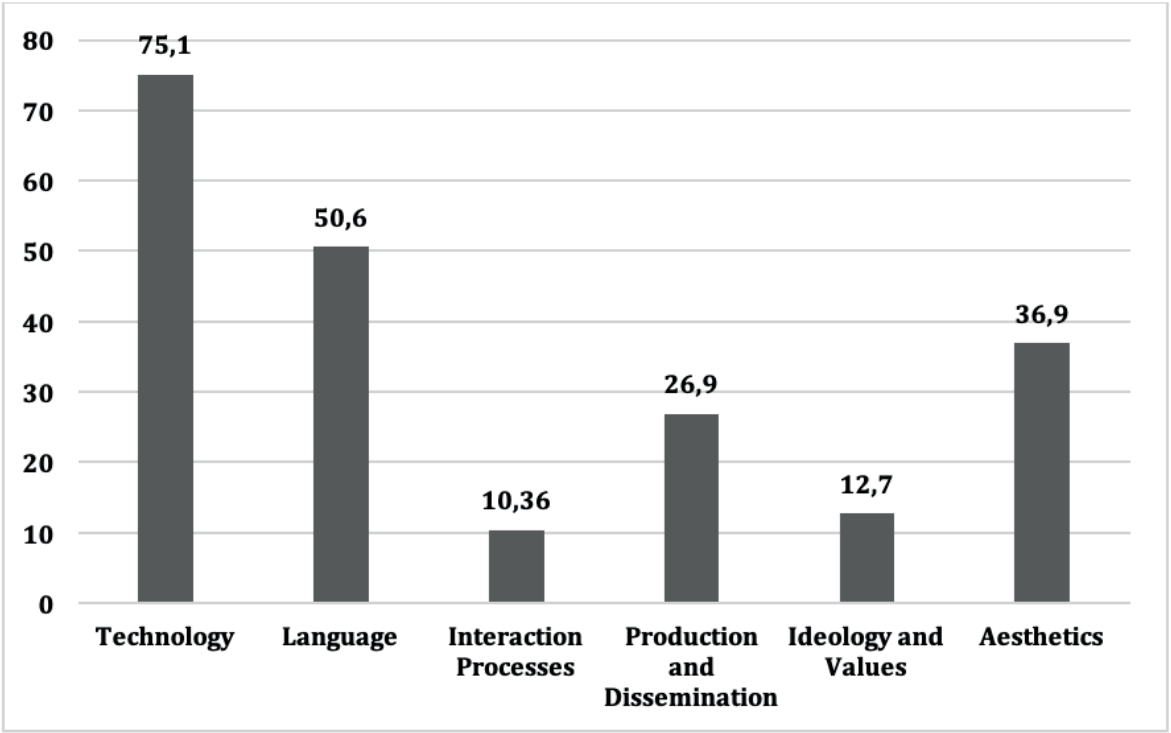
Chart 12 - Comparison between Dimensions and Training



Source: prepared by the authors.

Comparing advanced levels in all dimensions (Chart 13), it is clear that the dimensions that need the most attention are Interaction Processes and Ideology and Values, followed by Production and Dissemination Processes, precisely the dimensions most related to social actions, protection mechanisms and protagonism.

Chart 13 - Advanced Level Comparison across all Dimensions



Source: prepared by the authors.

The different levels of media competence seen above and their forms of belonging in digital culture reinforce the importance of considering the different ways of being a child and adolescent in front of digital screens. They also reveal the prominent place of the different digital artifacts in the processes of socialization and the forms of participation in the contemporary. Regarding the specificities of media practices, we highlight the need and challenge of mediations from the perspective of media-education (RIVOLTELLA, 2012, BELLONI, 2010, FANTIN; GIRARDELLO, 2009) to ensure the rights of children in relation to the media related to the 3 Ps: Protection, Provision and Participation (PINTO; SARMENTO, 1997, BUCKINGHAM, 2007, PROUT, 2010), here understood in their tensions, interdependencies and contradictions.

Final Considerations

The purpose of this paper is to present the results regarding different levels of media competence in children aged 9 to 12. These were systematized in two stages. The first stage included the profile of the children who participated in the research, followed by the emphasis on the levels obtained by them in each of the dimensions: Technology, Language,

Interaction Processes, Production and Dissemination Processes, Ideology and Values and Aesthetics. Then, crossing these dimensions with profile elements such as 'Gender, 'Age', 'Type of School' and 'Training', ensued an analysis on how they scored in relation to the advanced level, that is, the level at which the child demonstrates greater apprehension of the dimension researched.

In general, the answers obtained were at a very early level with basic knowledge still poorly consolidated (basic/intermediate level), that is, they presented basic understanding, but still with little autonomy. This points to the need to expand experiences that allow the transition to advanced level, in which the child presents more consolidated knowledge and mobilizes it in media interaction processes in a more autonomous way.

It is noteworthy that the Technology dimension obtained one of the highest scores of children at advanced level and the Interaction Processes and Ideology and Values dimensions presented the lowest scores, which indicates that greater knowledge in the technology dimension does not guarantee that it is used in an ethical, autonomous and responsible way. On the other hand, the category "I learned at school" was among the lowest scores obtained indicating the need for the development of training actions, as recommended by international bodies such as UNESCO. In order to meet these needs, and as one of the objectives of this project, the federal universities of Santa Catarina and Juiz de Fora (FANTIN; BORGES, 2019) developed training actions aimed at both teachers and children, respectively.

Another important data is the slightly more advanced performance of children from private schools, indicating that there may be a socioeconomic component related to this result. It is worth remembering that the Interaction Processes dimension obtained the lowest score for private schools. Precisely the dimension that refers to the ability to critically reflect on the interaction with the media, interpret content, interacting in solidarity and in a collaborative way, which indicates, once again, that access alone does not guarantee the acquisition of this competence. It, thus, reinforces the need for public policies that ensure quality access to media and educational actions that help the development of children's media competence in schools. So that they can access, enjoy, interpret and produce audiovisuals, as well as claim their right to quality media. This is necessary both with regard to school curricula and ongoing teachers' training, so that they can offer children concrete opportunities to develop competence, especially in the poorest layers of the population that are served by public education. In addition, media professionals can also work in this area by offering quality products, considering their social role as opinion makers and promoting the development of media literacy.

In this sense, it is important to highlight that from the mapping of media skills among children and adolescents, and from the reflections constructed in the broader context of the research, it was possible to go beyond the findings and develop several training proposals, aimed at children, adolescents, young students and teachers, with the intention of enhancing different knowledge and experiences of audiovisual production, as described in Borges and Silva (2019).

The circumscribed scope of the research and its limitations, and the challenge of contrasting such data with research conducted in other contexts, indicate the need for further research, and the urgent inclusion of media and digital culture studies in Brazilian schools emerged from the results.

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