

Media literacy and advertising discourse in three schools in Guayaquil

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Abstract: The advent of new technologies in everyday life has brought about a major shift in determining both the relationships between subjects, and the ways in which reality is interpreted and understood. Therefore, media literacy is posed today as an indispensable discipline in educational systems worldwide. This article presents the results of an experiment with high-school students. The aim of the experiment is to see to what extent media literacy can be useful to enhance the interpretative competence of students. The sample consists of students of 14-15 years of age, studying the Tenth course in three schools of Guayaquil. The independent variable comprised five advertisements. The results highlight the fact that, regardless of the socioeconomic context, students who were media literate showed a higher decoding and interpretative capability than those who were not.

Key words: media, media literacy, media education, critical thinking, advertising discourse.

Resumen: La irrupción de las nuevas tecnologías en la vida cotidiana ha supuesto una enorme revolución a la hora de determinar tanto las relaciones entre los sujetos como de comprender e interpretar la realidad. Por ello, la alfabetización mediática se plantea hoy como una disciplina indispensable en los sistemas educativos de todo el mundo. Este artículo recoge los resultados obtenidos en un experimento con estudiantes de educación secundaria. El objetivo es observar hasta qué punto la alfabetización mediática puede resultar de utilidad a la hora de potenciar las competencias interpretativas de los estudiantes. La muestra está formada por alumnos de 14-15 años, pertenecientes al curso Décimo de tres centros escolares de Guayaquil. La variable independiente es conformada por cinco *spots*. Los resultados subrayan que, al margen del contexto socioeconómico, los alumnos instruidos mediáticamente muestran una capacidad interpretativa y decodificadora superior a aquellos otros que no lo fueron.

Palabras clave: medios, alfabetización mediática, educación mediática, actitud crítica, discurso publicitario.

Introduction¹

In words by an expert in media literacy “it is now a habit to open publications on education and new technology referring to their fast development, transcendence, importance, influence, omnipresence, etc.” (Gutiérrez, 2007: 143). There is nothing strange in this habit, since scientific article is a wording gender and as such it has its *topoi*, one of which —the most frequent— is to begin by referring to the technical complexity of contemporary society.

This is usual, as the issues approached in this sort of research come from the incidence the disproportionate and sudden technologic development have on students, for in barely thirty years there has been an exponential growth that has lead to in a hyper-technologized society and multiple screens.

Researchers were not, nor are alien to these changes and from the beginning they approached them in view of helping the youngest to understand the messages from new technologies, but this endeavor ended up in a terminological quagmire: education in the media, education for the media, media education, audiovisual literacy, digital literacy, media literacy, multimode literacy, educative communication, educommunication, informational literacy, digital competency, poly-literacy, et cetera (Aparici, 2005; Buckingham, 2011; Gutiérrez and Tyner, 2012).

This confusion responds to various statements on the role of school and teachers in the present society; however, all share one same idea: the current school shall teach studies on communication. Other of the *topoi* is the reference to the recommendations of international agencies (UN, UNESCO, EU) on the need to implement subjects related to communication, either as transversality or a subject (Aguaded, 2012 and 2013; Gutiérrez and Tyner, 2012; Marín et al., 2013).

Finally, another *topoi* is to tell the incidence of the media on the youngest, the time they spent on the media, the fact they take the media values as their own, the manipulation of information by the media, the importance the media have acquired in modern societies, etc. and in spite of this, the media as a whole —it is a multimodal society owing to the convergence of different media— have ended up configuring a parallel school (Aparici, 2005: 87),

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whose values and repercussion have been counteracted by traditional schooling by means of education. This is the *raison d'être* of media literacy: train, educate, instruct students on certain contents they receive outside the classroom.

It is the implementation of a new literacy campaign. If in book societies, the students were taught to read (decode some signs) and write (build with those symbols), the same has to be done now in the school with the media. And if the books transmitted values and representations, the same occurs with the media. All this instruction process can, therefore, be called media literacy.

Many authors opt for the name followed in this work: it sets off from the concept of media literacy as learning, more precisely as critical learning, this is to say, it is not a result (close and stable), but a process (open and dynamical), by means of which the students, guided by the teachers, acquire dexterities and competences regarding the media. It is referred to in this manner by numerous authors (Buckingham, 2003: 4; Gutiérrez and Tyner, 2012: 35).

Media literacy is inheritor of education on media, a trend that was developed in the last decades of the XX century and which paid attention to the critical reception of conventional mass media. Aparici (2005: 85) provides a certain perspective of what this trend presented: "education for the media mainly deals with studying the media and digital technologies for information, in view of learning the constructions of reality they make as well as offering instruments to express through them".

However, the heavy influence exercised by new technologies (Aparici, 2005: 90; Mattelart, 1989: 21) somewhat determined the forgetting of critical thinking searching for the instrumentalization of media education, which some intend to turn into technological training. This mechanistic tendency has not disappeared, and at present, as we will see further, there is still ongoing research on the students' techno-digital abilities.

However, many are the voices against this instrumental bias. One of them is Aguaded's; an expert in media literacy and director of *Comunicar*, a journal that has become the speaker of this critical perspective and who wrote two monographs on this issue (Various authors, 2008 and 2009). In words by Aguaded (2013: 7): "media literacy is understood as access to the media, understand them integrally and have a critical perspective of their contents, generating communication in multiple contexts".

It is necessary to stop for a moment in the concept of "critical look", because the supporters of this trend are not detractors of new technologies,

what is more, they consider them a drive for development in modern society, use them and weigh their incalculable benefits; however, they deem they are not totally innocuous, and consequently they think students must be trained to face them. Their statements surpass mere technologic information: “media literacy is more than digital literacy, for it recognizes the importance of the technological medium and adds critical values and awareness in the education on the media” (Marín et al., 2013: 6).

As it is noticed, in this definition media literacy is associated with the (old) education on the media, from which it takes awareness and critical values. This is the feeling of many authors, for whom literacy must be liberating and dignifying, it has to contribute with values for the students, all in all, it must go beyond the school to end up influencing over the entire life (Gutiérrez and Tyner, 2012: 32; Aparici, 2005: 86; Camps, 2009).

Not only do the theoreticians defend this critical stance before the media, but also international agencies position themselves and defend their imperious need to educate the citizens in a critical way as regards the media. In such sense, UNESCO establishes that media literacy must comprise five basic competences, the five C's: “comprehension, critical thinking, creativity, cross-cultural awareness and citizenship” (UNESCO, 2008: 6).

Therefore, it is not to safeguard the youth from the media, but to educate them so that they know how to face the media in a critical and reflective manner (Ortiz-Brennan, 2015; Ramírez, 2011; Scolari, 2011). To sum up, as stated by Belmonte and Guillamón (2008: 115):

Educate the gaze of the TV spectators implies making them aware of the characteristics of the TV media and the rhetoric of their texts/programs, but also in a very important manner of their position as spectator subjects. This way, a sort of audiovisual education is needed to teach about the media and their languages, but emphasizing their importance as receiving subjects that build their identity, partly, by means of the television representations.

To conclude, it is worth remembering Ferrés (2007: 102), who by media competence understands as “the individual's capability to interpret and analyze from a critical reflection the images and audiovisual images”. In this regard, and within the advertising context, Fernández-Ulloa (2012) points out that working with advertising at school allows developing both creative and critical thinking. The author explains that as long as the students can be more manipulable by publicity and are the consumers of tomorrow, media literacy in advertising becomes indispensable in modern school.

This way, advertising literacy would reduce the children's susceptibility to advertising influence. In the face of this, Rozendaal et al. (2011), on

the grounds of empirical studies, point out that this advertising literacy, understood from a purely cognitive standpoint, can hardly support children to face publicity, for these propitiate a poor-elaboration processing, which would not foster critically thinking on the basis of the knowledge they have about publicity. This conclusion is also drawn by Hudders et al. (2016), who found that abilities related to attitude are more beneficial to hinder publicity influence than others that act merely on the cognition field.

This way, and from the definition of advertising literacy as the acquisition of competences to analyze, assess and create persuasive messages (Livingston and Helsper, 2006: 562), Rozendaal *et al.* (2011) pinpoint three directions to act: conceptual, actuation and attitudinal. For their part, Livingston and Helsper (2006) also differentiate between the processing of children and adolescents, for while the former may become more influenced by the products' physical characteristics, the use of impacting images, famous prescribers, seductive jingles, etc., the former will be more susceptible if the presented arguments are solid or if answers for the possible counter arguments are presented.

In the end, advertising literacy keeps a close relation with the maturity of the very subjects and their experience as a consumer and receptor (Hudders *et al.*, 2016), so it is noticeable what most of the programs developed about advertising literacy are aimed at children under 12 years of age, obviating older audiences (Meeus *et al.*, 2014). It is indeed from this age when there should be more work on the conceptual dimension of advertising literacy, i.e., on the intention of selling, the persuasive tactics, the target audience, etc. (Rozendaal *et al.*, 2011: 346).

Media literacy in Ecuador

In the case of Ecuador it is convenient to distinguish between the politicians' good intentions, the reality in schools and university researches on media literacy. In Latin America, the first public references to ICT appear by the late 1990's. Early in the XXI century some countries start designing public policies, setting up projects and programs in which ICT integrate into formal education, such as *Programa 1x1* in Argentina, Chile, Peru or Uruguay (Guerra and Jordán, 2010; Lagos and Silva, 2011).

These decisions are not alien to the fact that in 2000, UN included ICT among the objectives of the Millennium Development Goals and that in 2003 and 2005 world summits on ICT and society were held. Ecuador joins this transformation a bit later. In 2005, the first strategies are designed,

they do not develop owing to the continual reformulations of successive governments. In 2006, public policies on ICT become naturalized with the publication of the book *Libro blanco sobre la sociedad de la información*, [The white book on the Information society], which serves as context for two projects: *Maestr@com*, whose goal is “to improve and accomplish learnings in children and adolescents by incorporating ICT into teaching work”, and *Educar Ecuador*, whose goal is “to execute the defined policies for the integration of ICT” (Peñaherrera, 2011: 80).

Later on, the Government sets into motion the program: *Mejoramiento de la calidad de la educación pública para el fortalecimiento del aprendizaje a través de las TIC: de tal palo, tal astilla* [Improving the quality of public education for the strengthening of learning via ICT: following suit]. These initiatives have a continuation in the project *Escuelas del Milenio* [Millennium schools], which at present is developed by the Ministry of Education. All of these projects and programs are ultimately supported by the decree of the Organic Law on Communication in 2013, in which article 74 recommends that the media should “tend to edu-communication”.

Another utterly different thing is the reality of the schools, as it frequently occurs that the educational policies designed by the governments have little to do with the school reality. Peñaherrera (2012: 88) in the conclusions of her work, on media literacy in the Ecuadorian context, states that the incorporation of ICT into the educational sphere is a complex task, as such integration depends on a number of agents, decision and administrative levels, and in conclusion she states the lack of a coherent and planned policy between them negatively influences such incorporation. This is to say, bureaucracy, the myriad of actors and the lack of clear goals make it impossible an efficacious setting up of ICT in schools. This opinion is not novel in the context of Peñaherrera's (2011: 74) research, for in a previous work she stated that the implementation of ICT in Ecuadoran Schools lacked coordination, a problem also already detected by Ramírez-Romero (2006: 74).

More conclusive is Valdivieso (2010: 10), who in his research's conclusions, states that in general terms, teachers were not trained in ICT and that in the centers where there is infrastructure there is not an adequate use of technologic resources, all of which makes us exclaim: “it is alarming that at present there are no training courses for the use of ICT in the classroom”.

It is true that projects *Mejoramiento de la calidad* and *Escuelas del Milenio* are a good start for the gradual integration of ICT in the room; however, Valdivieso (2010: 11) states that the road Ecuador still has to go regarding

ICT is long. The reason for this delay must be sought in the discontinuous, scarce or null investment on telecommunication as well as on centralization and political and economic instability (Jurado-Vargas, 2005: 112).

The panorama is even less encouraging in the sphere of research, which unlike other countries, is exiguous. Scarce are the studies which have been carried out in Universities on this subject. In 2010 the first works appear which without disregard for Peñaherrera (2011 and 2012) were produced by professors of Universidad Técnica Particular de Loja [Private Technical University of Loja] (Marín et al., 2013, 2014, 2015; Rivera et al., 2015; Valdivieso, 2010). Seven are the works so far produced and everyone has the same technicality, this is to say, all follow the aforementioned pattern, for its goal was to observe both the degree of knowledge and application by teachers and students regarding ICT.

The most surprising is that almost all works refer to Means (1998) and McClintock (2000) to argue that ICT on their own would not make the students more intelligent or that computers are a mere tool for work. They also resort to the renowned theoreticians of media literacy (Aguaded, Aparici, Pérez-Tornero), yet all of them focus on measuring, calculating and computing the knowledge and use of technology by means of qualitative techniques.

In like manner, it is surprising that every one starts from Ferrés' (2007) dimensions and then pay attention to those purely technical, disregarding others such as language, ideology, values and aesthetics, which maybe provide more information on the students' relationship with technologies. These works underscore that the dangers against which Gutiérrez and Tyner (2012: 38) have warned: 1) reduce media education to the development of digital competence; and, 2) reduce digital competence to its most technological and instrumental dimension. This way, it can be stated that the splendor of ICT, the triumph of gadgets and technological fascination have led to a very limited conception of media literacy (Buckingham, 2003: 135).

Ultimately, it is important to remember that this technical consideration of ICT has been already warned by Jurado-Vargas (2005: 112) for Ecuador in *Diagnóstico de las políticas de TIC en Ecuador* [Diagnostic of ICT policies in Ecuador], when in the conclusions of his work criticizes that both the political, juridical and economic vision prevailing in public planning regarding technology implies considering ICT as mere "technologic merchandise that may be produced, offered and consumed". Heeding these works, it would seem as though there has been no advancement, since researches have no gone beyond the quantitative level, in spite of the numerous voices that warn

that technology on its own does not solve problems in education nor does it imply a significant restating of teaching (Buckingham, 2011; Peñaherrera, 2011; Scolari, 2011).

Research development

Before continuing, it is convenient to warn that, previous to the present research, a similar experiment was carried out in school Francisco Huerta Rendón (FHR), whose conclusions are gathered in “Education in the media as a contribution to Plan Nacional del Buen Vivir [National Plan for Living Well]. An experiment in a school in Guayaquil.” (Rey et al., 2015), a work presented in 2015 in III Congreso Científico-Internacional “Tecnología Universidad y Sociedad” [III Internal Scientific Congress “Technology University and Society”]. This article is then the broadening and continuation of the research presented.

Such work, in spite of having an exploratory end, for there are no data on the interpretative capacity of Ecuadoran students and it is urgent to establish the status quo of the issues so that authorities can intervene, it is developed as a correlational research as it intends to measure the relation between the students' interpretative capability and their media literacy, this is to say, it is correlational hypothesis (observing the incidence of literacy in the interpretation), bivariate (relate literacy and interpretation) and nonreversible casual.

The goal is to observe to what extent media literacy, in general, and advertising literacy, in particular, modify the students' interpretative capabilities. The starting point are three of the six fundamental dimensions of audiovisual communication pointed out by Ferrés (2007: 103), these will be revised later by Ferrés and Piscitelli (2012: 79-81).

In short, we set off from the dimensions related to language, ideology, values and aesthetics. These three dimensions refer to the capacity to read, understand and analyze audiovisual messages from three different perspectives, respectively. This way, the dimension of language focuses on the sense, meaning, narrative structures or categories and genres; the dimension of ideology and values, on the capacity of the messages to represent reality, transmitting certain interests and values; and, the aesthetical dimension, on the assessment of the message from the standpoint of the formal and stylistic aspects, and of relations with other artistic expressions. And to do so, a two-degree experiment (with and without instruction) was prepared in an experimental and a control group, only measuring later (Igartua et al., 2005;

Molina et al., 2012). The experimental group attended a workshop on the analysis of publicity images in the days before.

Background. Before the experiment, in the first place we analyze the study plan of the undergraduate program of Basic Education of the Faculty of Philosophy of Guayaquil and it is noticed that as in many other faculties in other countries (López and Aguaded, 2015), there is no subject related to communication. Secondly, the study plans of the three selected centers are analyzed; such plan is the same for every center in the country and it comes from the Ministry of Education. Neither is there a discipline or transversality related to communication. However, there is an exception in the selected centers: Colegio Politécnico [Polytechnic School] (also known as COPOL, henceforward COP).

This center is one of the few in Guayaquil that offers international high school studies that in spite of their name, in COP, not only comprehend the last three years of pre-university schooling, but the entire basic education; likewise, this center, under determinate legal dispositions, has extended its teaching hours from 35 to 38 a week, and finally, this is the only school that includes communication, which offers it, not as a subject (it is not considered in the national study plan), but as a transversality that generates from the discipline of Language, which influences on the rest of subjects and is broadened by means of series of complementary activities.

Universe. It comprises the tenth level students, the final in Basic General Education, of three school centers in Guayaquil: COP, FHR and Colegio Santo Domingo de Guzmán [Santo Domingo de Guzman School] (SDG). They are three schools with utterly different characteristics. COP is a private, mixed and laic school (with a monthly fee of about 400 USD); SDG is a Catholic, women-only, private school (with a monthly fee of about 200 USD); and, FHR is a laic, mixed, public school (it is linked to the university of Guayaquil and it is where students of Basic Education carry out their practices).

Regarding the location of the schools in the urban context, COP is located in a peripheral residential zone; SDG, in a central urban zone, in a middle class neighborhood; and, FHR in an urban zone far from downtown, in a popular neighborhood. The choosing of students in tenth level as research subjects is because they are between 14 and 15 years of age, this is to say between adolescence and youth; a demographic segment, which in spite of being studied less than children (Meeus et al., 2014), has already been analyzed in the Ecuadorian context in previous researches (Marín et al., 2014; Marín-Gutiérrez et al., 2015), even if these extended the age interval

to 18 years. In total, the population comprised 327 students of the three schools considered.

Sample. Two tenth-level groups were chosen for each school, which became three experimental and three control groups. This way, following a multistage sampling (non-probabilistic owing to the convenience of selecting the schools and education level; simple random to select the groups out of the tenth levels), out of the 327 students in the universe, 203 were selected (sample calculated at a 95% confidence level and error margin of $\pm 3,7\%$): 41 students from COP (23 in control group and 18 in the experimental), 68 from SDG (33 and 35, respectively) and 95 from FHR (48 and 47, respectively).

A total of 104 students were comprised in the control group, while 100 in the experimental one. It means they are balanced groups. As it is noticed, there is an ample difference between the students in each group (20 from COP, 30 from SDG and 50 from FHR, on average), which might give an idea of the sort of education offered in each.

Dependent variable. From a large sample of spots, which at the time of the research were broadcast over the Ecuadorian television companies, five with different characteristics were selected, for with each one different aspects of publicity communication are intended to be measured:

- *Spot 1.* Calcibom. Bone-restoring tablets for women. The student's goal is to observe machismo.
- *Spot 2.* Carl Jr. Junk food. Their goal is to observe sexism, the healthy/unhealthy of the product and availability to purchase.
- *Spot 3.* National assembly. Government publicity. Their goal is to observe knowledge on the political sphere and the comprehension of the message.
- *Spot 4.* Movistar. A private telephone company. Their goal is to observe interpretative capacity. It is a very cognitive TV ad, i.e., an advertisement that demands higher intellective capacity to understand it.
- *Spot 5.* CNT. A public telephone company. Their goal is to observe interpretative capacity. It is a more visual TV ad, i.e., an advertisement that needs a great decoding capacity to be understood, while lower intellective.

Questionnaire. A first questionnaire is applied to the pilot group comprising 22 tenth-level students in view of verifying their comprehension of the questions, and in general, the reliability of the measuring instrument. After this test, which was assessed by the two experts, the questionnaire was

shortened to 23 questions, closed and open, related to the subjects' capacity of understanding and interpretation as well as attitudes to publicity messages. At the top of the questionnaire there are questions regarding age, sex and television preferences.

Finally, it is worth pointing out that the advertising discourse has been chosen as object analysis. Regarding the media, numerous are the researches on gender, inequality or racism, and lately on the use of ICT in schools; however, exiguous or nonexistent are those on the publicity message, which is deemed persuasive, manipulating, sexist, et cetera.

Indeed, this noxious nature of publicity is what has taken authors to approach how adolescents understand and interpret it, and of course, also the heavy influence that publicity messages have on their behavior, as it occurs that on occasion, scholars approach the sexist nature of TV or inequality in the press, neglecting that spots are as influential or more than TV shows or variety programs. If in addition, as exposed, it is a highly disruptive message, all the more reason to approach its study.

Results

By and large, there are differences regarding the interpretative competence of the students in function of whether they attended the workshop. The most significant case is observed for the Movistar spot, which presents the message indirectly or ironically and requires higher cognition levels. Being questioned by the interpretation of the meaning, only 4% of the FHR control group interprets it correctly v 25% of the experimental. In the other two schools, data are similar, though slightly superior: SDG: 13 and 29%, and COP: 11 and 27%, respectively.

However, applying chi-squared test, significant differences are found only between the groups of the first center, FHR ($\chi^2=8,13$; $p<0,005$). Something similar occurs with the CNT spot, even if with higher percentages, not logical but iconic. Students in FHR control group who interpret it correctly account for 40% v 59% in the experimental group; in the case of, SDG, 36% v 34%; and in COP, 35% v 79%, respectively. This way, there are significant differences both for COP ($\chi^2=7,51$; $p<0,007$) and FHR ($\chi^2=3,05$; $p<0,09$); in the latter, nevertheless, with an error margin above that commonly accepted in Social Sciences.

Furthermore, the subjects of the experimental groups usually show a greater sensibility for aspects regarding machismo and sexism. This way, in relation to the first, one sees how the experimental group is more susceptible

and produces higher figures. In FHR, 31% of the subjects in the experimental group and 22% in the control one detect machismo in the Calcibom spot; while, in COP, 84% and 71%, respectively.

More noticeable is the case of SDG (women-only school), the students in the experimental group detect machismo in such spot account for 92% v 76% of the control group. It is only in this school precisely where one notices significant differences between these groups ($\chi^2=4,94$; $p<0,03$). There are also certain differences —though not significant— in function of the sexes in mixed schools: in COP, 81% of the female students detect machismo v 73% of male students; while in FHR, figures are 24 and 22%, respectively.

With regard sexism, it is worth underscoring that the respondents, in general terms, barely detect sexism in the Calcibom spot (FHR, 14%, COP, 18% and SDG, 24%), but do detect it in Carl Jr. spot and with similar values (SDG, 92%, COP, 84% and FHR, 81%). This would indicate, given the differences between advertisements, that students relate sexism only with eroticism, not with attitudes toward women.

Regarding the second of the brands, Carl Jr., which in order to promote its junk food product uses a woman in an almost obscene manner, the percentage of students that rejected the ad because of sexism was larger in experimental groups than in control ones for the three schools (95 v 87% in SDG; 76 v 63% in COP; and, 33 v 19% in FHR); also the percentage of rejection in female students was higher than in male students in mixed schools (89 v 73% in COP and 37 v 29% in FHR).

However, in none of the cases such differences were statistically significant. In this line, the case of sexism observed in the Calcibom spot is different, even if the general level of detection was lower, as pointed out, there were significant differences in COP, both between the experimental and control groups ($\chi^2=5,37$; $p<0,03$) and in function of the sex ($\chi^2=3,88$; $p<0,05$).

As for the latter, and in agreement with the rest of the observed results, truth is that regardless of statistically significant differences, it is found that female students, aside from their belonging to one or another social group, usually are more competent in the interpretation than male students and are also capable of detecting to a larger extent issues related to machismo and sexism.

In like manner, and ultimately, there are differences in respect to sensibility and tolerance for machismo and sexism at the level of school. Schools SDG and COP are more sensible to these phenomena and present higher rejection. Conversely, FHR, the catholic, mixed and public school, is

more tolerant and pays little attention to it. Regarding data on machismo, it is rejected by 92% in SDG, 84% in COP and 31% in FHR. And about sexism, it is detected by 95% in SDG, 76% in COP and 34% in FHR. This way, significant differences can be found between the three centers for both variables: machismo ($\chi^2=74,49$; $p<0,001$) and sexisms ($\chi^2=68,60$; $p<0,001$).

Again on the Carl Jr. spot, the students in the three schools report very similar values at the time of considering junk food harmful: FHR, 81%; COP, 84% and SDG, 89%. However, in this case significant differences between experimental and control groups in two of the centers can be established: in COP it is deemed harmful for health by 94% of the experimental group v 70% of the control group ($\chi^2=3,98$; $p<0,05$); while in SDG, results are the contrary, deemed pernicious by 80% of the experimental v 97% of the control group ($\chi^2=4,72$; $p<0,03$).

In any case, truth is that in spite that the product is largely considered harmful, a high percentage of students agree on buying it, in short, 64% in FHR, 81% in COP and 92% in SDG, which mean a certain influence from the TV on food habits, for in spite of being aware that it is harmful, they would buy it; this issue, in the case of FHR, heavily depends on the sex of the subject, there being significant differences between male students (76%) and female students (55%) who would be willing to buy the product ($\chi^2=9,16$; $p<0,003$).

Separately, students in the three schools coincide on the exiguous knowledge that have of their political sphere where they live. Being asked about the political actors that appear in the institutional spot of the National Assembly, few recognize them: COP, 33%; SDG, 22%; and, FHR, 17%. Also on that occasion, but only in the case of COP, the female students report higher percentages (albeit the differences are not significant) —45% v 28% of male students—; while in FHR they present almost identical values —19 female students and 20% male students—.

From a more general standpoint, there are disparate values between schools in preferences and likes. This way, FHR students like publicity better: 82%. Conversely, in the other two schools it is not so: COP, 64% and SDG, 59%. This preference is directly related with TV diet, since FHR students are the ones that watch TV longer hours a day: 3,91 (Saturday, 4,99 hours, and Sunday, 5,10 hours). Conversely, the other two schools display lower figures, not similar however: SDG, 2,47 hours a day (Saturday, 3,23 hours, and Sunday, 3,01 hours), and COP, 1,96 hours a day (Saturday, 2,77 hours, and Sunday 2,23 hours).

Another difference is that students in FHR, from a lower socioeconomic status, are the most willing to buy: 69%. Conversely, the other two schools display inferior and similar results: COP, 54% and SDG, 52%.

More interesting are these when attention is paid to purchase intent in function of the various brands advertised. This way, while for FHR students there is a similar purchase percentage for all the products, which range from 64% to 83% for in CNT; the other two schools have a preference for Carl Jr. product (SDG, 92% and COP, 81%), whose campaign, compared with the rest of the advertisers, might have these schools as a target audience.

Finally, regarding credibility levels, COP students, the only ones that receive information on the media, are the ones that believe in publicity the least, without significant differences between those who received instruction and those who did not. Thus it is noticed, for instance, in the advert of the National Assembly, its message is only believed by 30% of the students; by contrast, 62% in SDG 77% in FHR believe in it. As well, COP students are the ones that believe the least in CNT offers: 58%, v 62% in SDG and 79% in FHR.

Discussion and conclusions

In the first place, it is worth mentioning that subjects who participated in the seminary of media literacy slightly improve their interpretative capacity, mainly FHR students, the only public school, which explains that the individuals' socioeconomic conditions actively intervene in the recodification of publicity messages. From Livingstone and Helsper's (2006) standpoint, adolescents, segment of the respondents, would be more susceptible to publicity argumentation and the conceptual aspects than more superfluous or stylistic aspects; this way, working on this exact dimension would allow processing better the messages.

This way, the fact that the workshop does not imply a radical change for the female students in SDG regarding any of the selected spots would correlate with their higher cognitive and critical capacity, regardless of the socioeconomic stratum they belong to, as previously observed. However, it is noticeable that in this school is where we found the largest difference between experimental and control groups in the detection of machismo.

This, in perspective with the data on the stressed sexism in Calcibom advertisement in COP, school that offers subjects related to media communication. Contrasted by the differences observed, in general, in the different perception of sexism depicted in Calcibom and Carl Jr. spots makes

it necessary the need to work with these concepts in the classroom. In any case, as we have expressed, by and large, female students detect machismo and sexual contents in publicity better than male students, which concurs with result found in other research, e.g., Vidal-Vanaclocha (2015). In like manner, the observed data also allow verifying the poor knowledge of political issues the students in the three schools have.

As regards the like for publicity, predisposition to buy and TV diet, it is relevant the fact that out of the three schools, FHR has the highest values; this is the school where students have the least critical and interpretative capacity before publicity. In this line, it is relevant to retake the works by Rozendaal et al. (2011) and Hudders et al. (2016), as it was possible for students in this school, owing to their economic and sociodemographic characteristics, at a lower maturation level in respect to the other two schools, in such manner that they might be more heavily influenced by the other two dimensions of advertising literacy: the attitudinal and actuation.

To sum up, the main conclusion from this trial is that media literacy can be greatly useful when teaching and training the students so that they understand the messages and can take a critical stance before them. The students that attended the workshop of analysis of publicity images, mainly those with a lower socioeconomic level, present a better interpretative competence, which demonstrates that this sort of training offers advantages that authorities should not overlook.

Moreover, this trial produces significant data on issues regarding sexism, machismo, interpretation of reality, TV diet or the credibility of the message, all of this in connection with the students' sex and socioeconomic group. Media literacy relates with all of these aspects, for the least media competent students are more vulnerable and have a less critical attitude for the messages, which becomes higher credibility and higher consumption propensity.

Likewise, the students with better analytic capacity are ones that reject degrading attitudes toward women the most. To sum up, it can be stated that students in highly technical societies, in general, and those in Guayaquil, in particular, need to be educated in media, as only this way, this is to say, by means of media literacy, will they be critical and free, as some theoreticians put forward.

Recommendations

In the light of the obtained results and following recommendations by experts in media literacy (Pérez-Tornero, 2012; López and Aguaded, 2015),

it is advisable to introduce subjects related to communication both in the study plans of the Faculties of Education and in basic-education schools, in view of, first, that future teachers are trained in media, and second, that schoolchildren receive information on the media, in the way of training and become competent in relation with communication.

By the same token, it is interesting to work with students in various courses, as each age group has to face different formats and publicity contents (Meeus et al., 2014). In any case, the issue is to elucidate whether these studies shall be offered as a discipline or a transversality. At present, the unanimous opinion of the theoreticians of media literacy is that such studies have to become an independent and autonomous subject.

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