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Francisco José García-Peñalvo
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Processes and Mechanisms of Narrative Persuasion in Entertainment-Education Interventions through Audiovisual Fiction. The Role of Identification with Characters

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ABSTRACT
The aim of this paper is to further our knowledge of the explanatory processes of narrative persuasion in the field of health communication, using data obtained in a research study of entertainment-education based on audiovisual fiction. Participating in the study were 208 young persons between the ages of 14 and 20, randomly distributed into three experimental conditions in which each group was exposed to a different episode of the television series “Revelados, desde todas las posiciones.” The results showed that greater identification with the main character of the episode transmitting the prevention message was associated with greater cognitive elaboration, which in turn led to more favorable attitudes toward the topics addressed. However, counter-arguing was not observed to play a significant mediating role. The findings of this study allow us to conclude that getting people to think and reflect can help persuade them, which suggests that the narrative persuasion models and the dual models of rhetorical persuasion can be compatible in certain contexts.

Categories and Subject Descriptors
J.4 [Social and Behavioral Sciences] Psychology
J.3 [Life and Medical Sciences] Health

General Terms
Experimentation.

Keywords
Narrative persuasion, entertainment-education, audiovisual fiction, identification with characters, cognitive elaboration, counterarguing.

1. INTRODUCTION
The narrative persuasion models applied to the field of health communication (see the Extended Elaboration Likelihood Model, E-ELM, [22] the Entertainment Overcoming Resistance Model, EORM, [15]) posit that entertainment-education formats can cause changes in attitudes through identification with characters, precisely because the identification reduces counterarguing and therefore the message is assimilated by the audience with no resistance [4]. Nonetheless, empirical research into this topic is in its early stages and has shown contradictory findings. The aim of the present study is to contribute to this debate and analyze the relations between identification, cognitive elaboration, counterarguing and attitudinal impact using data obtained in a research study addressing entertainment-education based on audiovisual fiction.

A large part of the theoretical reflection on narrative persuasion is based on affirming that traditional persuasive messages (such as commercial advertisements) are processed differently from narratives (such as television series or movies), since the processing goals and motivations are different in each case [22]. It is assumed that traditional persuasive messages contain lists of arguments that are presented in an explicit way, whereas narratives are not thought to contain explicit arguments, but rather to illustrate them through the presentation of events since the action is focused on the main characters in the story. Secondly, it has been noted that traditional persuasive messages show a clear educational-attitudinal goal, whereas narrative formats are presented as entertainment and are designed for enjoyment. Thirdly, it is assumed that the processing goal of the individuals exposed to traditional persuasive messages is to develop the correct attitude in regard to a specific topic and therefore their involvement in the topic addressed in the message plays an important role [20]. In contrast, it is assumed that the basic motivation of audiences for consuming narratives is to seek entertainment or enjoyment, that is, to become involved in the story and focus attention on it and on the characters. Moreover, it is assumed that involvement with the topic addressed in the narrative is not relevant, but rather that what is really important is involvement in the narrative and with the characters during the processing of that narrative [8,15].

For all of the above reasons, the dual models of rhetorical persuasion, such as the Elaboration Likelihood Model (ELM; [20]), are not considered to be suitable for explaining narrative persuasion processes [4,8,22]. The ELM predicts that if individuals have sufficient ability or motivation to process a rhetorical persuasive message, they will carefully evaluate the
arguments supporting that message. In this context, Petty and Cacioppo [22] have defined cognitive elaboration as a process of reflection on the contents of a persuasive message. It is assumed that cognitive elaboration will cause cognitive responses to be generated in relation to the topic of the message (issue-relevant thoughts) that will determine whether it has an attitudinal impact or not. However, if individuals lack the motivation or the ability to critically process the arguments of the message, there may still be an attitudinal impact owing to the setting in motion of a peripheral processing based on the presence of cues such as the attractiveness or the credibility of the message source. Therefore, the ELM proposes that if people pay attention to the message and carefully processes it, the persuasive impact is explained by the counterargument process, that is, by the cognitive responses generated during reception of the message (and, in particular, its polarity).

Otherwise, narrative persuasion models (ELM and EORM) predict that if people focus their attention on the narrative -and are transported by it-, the attitudinal impact is explained as coming from a kind of “short-circuiting” of the counterarguing or critical reflection processes [15;22]. In fact, individuals immersed in the narrative have difficulty in critically reviewing the information present in the story, reducing their ability to counterargue, and therefore they are more easily influenced by it [23]. In other words, involvement or engagement (with the narrative and the characters) and critical reflection are incompatible processes.

However, even though narrative formats do not explicitly present arguments from an external source, these can appear in dialogues taking place among characters during certain moments of the story [14]. Indeed, fictional narrative formats designed to bring about positive social change show a clear educational component that is sometimes manifested in the use of epilogues that reinforce the message [17].

In two experimental studies it was found that including in a written narrative a scene in which two characters discussed a topic with each contributing arguments did indeed provoke reflection (more than half of the participants generated cognitive responses related to the central topic of the story) and, moreover, the polarity of these cognitive responses predicted the attitude towards the topic addressed in the story, whether or not it was one with low involvement or personal relevance. Moreover, reflection was not a process incompatible with narrative involvement, since no differences were observed in this process between the participants who had written cognitive responses in regard to the topic of the story and those who had not. Now then, these authors also found that identification with the main character of the narrative predicted attitudinal impact, such that identification became a second mechanism of narrative persuasion [6].

Taking the above study as a reference, if an argument in favor of a specific proposal is presented explicitly in a narrative message (as occurs in the fictional audiovisual messages of entertainment-education, in which the educational message is reinforced in the characters’ dialogues), one would expect reflection or cognitive elaboration to be aroused during viewing and that this process would be associated with greater attitudinal impact. However, what previous research has not yet analyzed is whether the cognitive elaboration that takes place in this context of narrative reception leads to more or less counterarguing.

The models used in the study of narrative persuasion (and in particular, E-ELM and EORM) posit that involvement with the narrative (transportation, absorption or narrative engagement) or with the characters (identification) are two relevant mechanisms for understanding how the persuasive process takes place [15;22]. In this context, identification with the characters is a mechanism “through which audience members experience reception and interpretation of the text from the inside, as if the events were happening to them” [3]. Slater and Rouner [22] postulate that identification with characters and counterarguing are incompatible responses, since identification means that the individual takes on the identity of the character and there is an ensuing loss of self-awareness. In this context, counterarguments are defined “as negative comments about the topic or implicit persuasive theme [in the narration]” [23].

Research studies on identification and narrative persuasion have found that identification with the characters of a narrative (measured with self-report scales or manipulated through subtle alterations in the narrative text, for example by varying the perspective from which the story is told) influences people’s attitudes, and is thus a mechanism responsible for the processes of narrative persuasion [5;13;19]. However, the studies that have attempted to test empirically whether identification reduces counterarguing have yielded contradictory findings: Moyer-Gusé, Chung and Jain [16] observed that identification was negatively associated with counterarguing, whereas in the study by Moyer-Gusé and Nabi [18] these two processes were not significantly associated with each other.

Cohen [3] has pointed out that one of the consequences of identification is that it stimulates reflection during reception of the fictional message. On one hand, taking into account that one of the fundamental dimensions of identification is cognitive empathy (putting oneself in the character’s place, viewing the story from the character’s perspective), identification “(…) is useful as a persuasion tactic because it can overcome the natural tendency to limit one’s thoughts and feelings to a single perspective” (p. 260). Moreover, this time supported by the ELM model, he also points out that identification can stimulate involvement with the messages “(…) which, in turn, increases the elaboration of messages and their potential persuasive effects” (p. 260). However, in the same text he also points out that since high involvement with the messages and greater cognitive elaboration incite a more critical processing, the identification (which involves a temporary loss of self-awareness) most likely would lead to a less critical reading of the message. Therefore, Cohen [3] considers both possibilities in his argument: that identification increases cognitive elaboration by constituting a process that generates involvement with the message or else reduces critical reflection.

Since the empirical evidence is not conclusive, the main objective of the present study was to test to what extent the attitudinal impact caused by exposure to fictional audiovisual contents designed as entertainment-education platforms (through the Colombian television series “Revelados, desde todas las posiciones”; see below) is explained because identification leads to greater reflection or rather to greater counterarguing. The model proposed is based on the E-ELM and EORM models and on the results of previous studies. We hypothesize that identification will be associated with greater cognitive elaboration (H1) and less counterarguing (H2). Furthermore, we also hypothesize that cognitive elaboration will be associated with greater attitudinal impact (H3) and thus we expect an
indirect effect of identification on attitudes. However, given that the research in this field is either incipient or contradictory, we also posit as research questions whether or not the cognitive elaboration is associated with greater or lesser counterarguing (RQ1), whether the counterarguing is associated with a greater attitudinal impact (RQ2) and whether an indirect effect of identification with characters can be observed through elaboration and counterarguing acting sequentially or only through counterarguing, as posited in the E-ELM [22] and EORM [15] models.

2. METHOD

2.1. Participants

Participating in the study were 208 young people between the ages of 14 and 20, with a mean age of 15.85; 51.9% were women.

2.2. Design and procedure

An experimental study was carried out in Colombia in 2013, within the framework of a project on entertainment-education that used as an intervention tool the television series “Revelados, desde todas las posiciones” (hereinafter RDTTP). The field work was carried out in eight different towns in Colombia, and the same procedure was used in each place. The participants were randomly divided into three groups, and each group was shown a different episode of the series (each one focusing on a particular topic). The impact of viewing the episodes was assessed through a questionnaire containing scales to measure reception processes and attitudinal impact. None of the participants had seen the television series before.

2.3. RDTTP

RDTTP is a television series addressed to young people between the ages of 12 and 19, co-produced by the Fundación Imaginario and Canal 13 in Colombia1. The series includes educational contents about sexual relation, sexual diversity and gender violence. The making of this fictional melodramatic series was based on research into entertainment-education carried out by Soul City (South Africa) and Puntos de Encuentro (Nicaragua) and the results obtained through entertainment-education in topics of sexual and reproductive health in other contexts [7;21;24].

The first season of the series RDTTP has 20 episodes lasting about 15 minutes each and presents a story with continuity from one episode to another. The main characters are Camila, Juan Carlos, Vanessa and Sebastián. Three episodes of the series were selected by the research team taking into account the topics broached in each of them: adolescent sexuality (episode 8 entitled “El amor necesita de dos” (you need two for love); n = 69), gender violence (episode 10 entitled “Porque te quiero” (Because I love you); n = 75) and sexual diversity (episode 17 entitled “Mamá tengo un retrazo” (Mom, there’s something different about me!); n = 64)².

The episode entitled “El amor necesita de dos” revolves around adolescent sexuality. Camila goes to her boyfriend’s (Rex) house to listen to music and he makes a sexual move that Camila rejects and she leaves his house upset. This episode thus attempts to reinforce positive beliefs about sexual decision-making. The main topic of the episode “Porque te quiero” is gender-based violence, and thus presents a more dramatic component. Two incidents of gender violence are shown. The first involves Sebastian’s parents and the second, Sebastian and Vanessa (relating to gender violence in dating couples). In the latter instance, Vanessa is seen dancing with another boy during some dance lessons. Sebastian gets jealous and tells Vanessa that now that they are going out she has to “respect” him. Vanessa reacts strongly and tells Sebastian: “You respect me, don’t treat me like your father treats your mother.” The episode is designed to make young people aware of the problem of gender violence in dating couples and to reflect on it, in an attempt to reinforce an attitude of rejection of gender violence.

The episode “Mamá tengo un retrazo” broaches the topic of expressing homosexual feelings and defending the rights of persons with that sexual orientation, particularly in the case of men. Juan Carlos confesses to a friend that he is gay, which causes a bit of consternation at first but then his friend tells him that he can count on him, that he is his friend. Later on, in the classroom where Juan Carlos is, a new student appears (Felipe) and the others in the class say he is gay and start making fun of him. Given the situation, Juan Carlos defends Felipe and ends up telling them all that he is gay as well. This episode thus attempts to reinforce a positive attitude toward gay men who decide to openly express their sexual orientation.

2.4. Instruments and variables

We employed a questionnaire composed of different scales that was administered to the participants immediately after they viewed the episode. The questionnaire gathered information about the reception processes, measures to assess attitudinal impact, and socio-demographic information (sex and age).

Identification with the main characters. Identification with each of the four main characters in the series was assessed using an 11 item scale (e.g., “I’ve wanted to draw some conclusions about the topic addressed there,” with the possible responses ranging from 1 “not at all,” to 5 “a lot”) ([13]). Four identification indices were created: identification with Camila (α = .86; M = 2.62, SD = 0.76), identification with Vanessa (α = .89; M = 2.50, SD = 0.84), identifications with Sebastian (α = .91; M = 2.39, SD = 0.90) and identification with Juan Carlos (α = .89; M = 2.10, SD = 0.80).

Cognitive elaboration. This was measured on a scale created by Igartua [12], consisting of four items (e.g., “I’ve wanted to draw some conclusions about the topic addressed there,” with the possible responses ranging from 1 “not at all,” to 5 “a lot”; α = .83; M = 3.31, SD = 0.93).

Counterarguing. We used the counterarguing scale created by Moyer-Gusé & Nabi [18], also composed of four items (e.g., “while watching the program, I couldn’t help thinking about ways that the information being presented was inaccurate or misleading,” with the possible responses ranging from 1 “not at all” to 5 “a lot”; α = .72; M = 2.27, SD = 0.89).

Attitudinal measures. To measure attitude, three groups of scales were designed, each comprising several items and relating to topics of adolescent sexuality, gender violence and sexual diversity. Each scale presented items that reflected the educational content of the episodes, together with other items that posed more general issues not directly addressed in the episodes and which were meant to camouflage the real objectives of the study.

To evaluate the attitudinal impact of viewing the episode addressing the topic of adolescent sexuality, the following items...
were included: “the decision to have sex or not is up to oneself,” “adolescents have a right to say no to sexual relations at any moment, even when they had at first agreed to it,” “visiting my boyfriend’s/girlfriend’s house or room does not mean I want to have sex,” “if I visit my boyfriend’s/girlfriend’s room and at some point decide I don’t want to have sex that doesn’t mean I am indecisive,” “teenagers have the right to decide when they want to have sex,” and “if I begin dating a person I am not obliged to go all the way just so they won’t feel bad.” For each item the participants had to mark “yes” (1) or “no” (0). An indicator of a favorable attitude towards sexual decision-making was created by adding together the scores of the six items, such that the higher the score, the more positive the attitude toward this topic.

To assess the attitudinal impact of the episode concerning gender violence we included two items: “a man must not insult his partner” and “a man must not tell his partner what to do” (in both cases the possible responses ranged from 1 “strongly disagree,” to 5 “strongly agree”). Based on these items we created an index on the attitude of rejecting gender violence (α = .82), such that the higher the score, the greater the rejection of gender violence. Finally, the attitudinal impact of the episode addressing acceptance of sexual diversity was evaluated with a single item that measures a favorable attitude towards gay men who decide to be open about their sexual orientation: “gay men who have ‘come out of the closet’ should be admired for their courage” (possible responses ranging from 1 “strongly disagree,” to 5 “strongly agree”).

3. RESULTS
To test the hypotheses and answer the research questions, and thus the model proposed, we used the macro PROCESS for SPSS developed by Hayes [11] and in particular model 6, which posits a mediational model with two mediating variables that operate in sequence. The traditional approach to mediational analyses, called the “causal-step approach” and developed by Baron and Kenny [1], posits that to carry out mediational analysis there must exist a significant effect of the independent variable on the dependent variable when the effect of the mediating variable is not controlled for (i.e. a statistically significant total effect). However, this approach has come under criticism and current practice establishes that a mediation effect (indirect effect) can be analyzed even when there is no significant effect of the independent variable on the dependent one; the use of bootstrapping techniques, a nonparametric re-sampling procedure, is also recommended [10]. In this study the indirect effect was calculated using 10,000 bootstrap samples for bias-corrected bootstrap confidence intervals. An indirect effect is considered statistically significant if the confidence interval established (CI at 95%) does not include the value 0. If the value 0 is included in the confidence interval, the null hypothesis positing that the indirect effect equals 0 cannot be rejected, that is, that there is no association between the variables involved [11]. Thus, we based our analytical strategy on this procedure in order to evaluate the indirect effect of identification with characters on the participants’ attitudes by means of the mediating processes of cognitive elaboration and counterarguing, both mechanisms operating sequentially. The analysis was carried out on three different subsamples as a function of the episode viewed, given that the attitudes reinforced by the different episodes focused on different aspects and also the characters involved in the preventive or educational message were different in each episode. The analysis run to test hypothesis 1 revealed that identification with characters was positively associated in a statistically significant way with cognitive elaboration in the three episodes considered (B\textsubscript{episode 8} = .72, p < .001; B\textsubscript{episode 16} = .57, p < .001; B\textsubscript{episode 17} = .48, p < .011), thus confirming the hypothesis posed. However, identification was not negatively associated with counterarguing, as posited in hypothesis 2. In fact, a statistically significant effect was only observed among the participants who watched episode 10, addressing gender violence, where it was found that identification with the main character of the episode (Vanessa) was associated with more counterarguing, (B\textsubscript{episode 10} = .28, p < .023).

In the case of hypothesis 3, a statistically significant effect of cognitive elaboration on attitudes was observed. In this sense, greater elaboration during viewing of episode 8 was associated with a more favorable attitude toward sexual decision-making, which was the message reinforced in that episode (B = .40, p < .038). Likewise, greater elaboration during the viewing of episode 10 was associated with greater rejection of gender violence (B = .58, p < .007). Finally, the participants that had most reflected while viewing the episode on sexual diversity (episode 17) showed a more positive attitude toward gay men openly expressing their sexual orientation without fear (B = .37, p < .040).

As to research question 1, no consistent results were obtained. Although cognitive elaboration was positively associated with counterarguing in all three episodes, this effect was only statistically significant in two cases (B\textsubscript{episode 8} = .51, p < .001; B\textsubscript{episode 16} = .34, p < .002; B\textsubscript{episode 17} = .18, p = .121).

In regard to research question 2, it was found that counterarguing did not have a statistically significant effect on attitudes, the effect being inconsistent: in relation to the episodes on adolescent sexuality (episode 8) and gender violence (episode 10), the association between this mediating variable and the dependent variable was negative but not significant (B\textsubscript{episode 8} = -.16, p = .314; B\textsubscript{episode 10} = -.17, p = .424), but for episode 17 (on sexual diversity) the effect was positive and marginally significant (B\textsubscript{episode 17} = .36, p < .070).

Finally, when the indirect effects of identification with characters on attitudes were tested, it was observed that the only variable that had a significant mediating role was cognitive elaboration. Thus, among the participants that watched episode 8, the indirect effect of identification with Camila on favorable attitudes towards sexual decision-making is explained by cognitive elaboration (B\textsubscript{indirect effect} = .28, SE = .14, 95% CI [0.1, .65]). Among the participants who viewed episode 10, the indirect effect of identification with Vanessa on attitudes of rejection of gender violence is explained by reflection or cognitive elaboration (B\textsubscript{indirect effect} = .33, SE = .13, 95% CI [.1, .65]). And thirdly, the indirect effect of identification with Juan Carlos, the main character in episode 17, on a favorable attitude towards gay men who come out is also explained by cognitive elaboration (B\textsubscript{indirect effect} = -.18, SE = .12, 95% CI [.02, .54]).

4. CONCLUSIONS
The findings of this research study confirm the important role of identification with characters as one of the mechanism responsible for the narrative persuasion processes in the context of entertainment-education interventions. They furthermore constitute an advance in the research in this field, since they allow us to clarify the relations between identification, cognitive
elaboration and counterarguing. Using as stimuli three episodes of the Colombian television series RDTP (designed to incorporate educational messages about adolescent sexuality, gender violence and sexual diversity), it was found that a greater identification with the main character of the episode transmitting the educational message was associated with greater cognitive elaboration, in turn leading to more favorable attitudes towards sexual decision-making (episode 8), a greater attitude of rejection of gender violence (episode 10) and a more favorable attitude towards gay men openly expressing their sexual orientation (episode 17). In none of the three cases tested was it observed that counterarguing played a significant mediating role, and this despite the fact that in two of the three episodes a negative relation was observed between counterarguing and attitudinal impact, although the association was not statistically significant.

These results are consistent with the ones posited in the E-ELM [22] and EORM [15] models and with previous research studies on the role of identification with characters as an explanatory mechanism of narrative persuasion [5;13;16;19]. Moreover, in the context of the entertainment-education intervention using fictional audiovisual formats incorporating explicit educational messages (in the characters’ dialogues and actions), it was observed that identification with the characters who were attempting to model the attitudes of the public stimulated cognitive elaboration but not counterarguing. This finding converges with the results obtained by Fikkers and Hoekens [6], who found that a written narrative containing arguments in the characters’ dialogues stimulated reflection in a majority of the study participants and that the polarity of the cognitive responses predicted the attitudes toward the topic addressed in the story. In that study it was also observed that reflection as a process was not incompatible with narrative engagement, a result that we also observed in the present study, since cognitive elaboration was associated with greater enjoyment[5] in the three episodes considered ($r(65) = .52, p < .001$, chapter 8; $r(72) = .50, p < .001$, chapter 10; $r(62) = .36, p < .001$, chapter 17), suggesting that they are not incompatible processes, which converges with the research into media entertainment and the impact of film productions [12].

From these findings it can be deduced that perhaps narratives created exclusively “to entertain” are not processed in the same way as fictional audiovisual narrative formats designed explicitly for an educational objective. Future research should broach this topic and test whether media entertainment narrative formats stimulate more or less reflection and counterarguing than those created in the context of specific interventions of entertainment-education. In any case, designing this kind of intervention not only to bring about identification and narrative engagement but also to cause the target audience to reflect on topics relevant to them seems a logical enough objective.

The present study also has certain limitations. First of all, one limitation of the study is that we did not have a pre-test measure of the attitudinal indicators, since we used a multi-group design with only a post-test measure so as not to sensitize the participants and thus avoid making the objective of the study obvious. The lack of a pre-test, however, meant that we were unable to test whether the mediating processes under consideration explained the attitudinal change.

Secondly, the descriptive information relating to the identification with characters shows that the scores were not high with respect to the four characters considered, despite the fact that they could be considered similar to the participants in age and cultural background. The reason for this could be that many of the sequences of RDTP were filmed in medium shots and to a lesser extent with close-up shots[2], and previous studies have found that close-ups tend to stimulate greater empathic responses to the characters [2]. Low identification with characters can in turn explain why there were no significant total effects in the attitudinal indicators, except in relation to episode 8 (devoted to the topic of adolescent sexuality), in which identification with the main character (Camila) did have a significant impact on more favorable attitudes towards sexual decision-making.

The results of the study allow us to conclude that causing people to reflect can lead to persuading them (instead of short-circuiting counterarguing processes), which suggests that the models of narrative persuasion and the dual models of rhetorical persuasion may be compatible in certain contexts, such as when messages are designed in such a way that the characters make explicit the arguments supporting the prosocial or preventive message through their dialogues [14]. As a consequence, characters and dialogues should be designed with the utmost care, given that it is a matter of fostering identification while at the same time the arguments set out in the dialogues should be convincing for the intervention target audience.

5. NOTES

1 The program forms part of the Eduentretenimiento + Movilización = Cambio Social (Education + Mobilization = Social Change) strategy that was designed and implemented in 2010 as a multi-media communication project aimed at Colombian adolescents aged between 12 and 19. This strategy was a response by the National Government of Colombia to the conditions and needs of Colombian young people in matters of sexual and reproductive health and rights.

2 The episodes of the series “Revelados, desde todas las posiciones” (first season) are available on YouTube at: http://www.youtube.com/user/REVELADOSDTP?feature=watches

3 The enjoyment caused by viewing the episode was assessed with the three-item scale by Hall & Zwarun [9], (example: “I had a really good time watching this episode of the series,” with responses ranging from 1 “Strongly disagree” to 5 “Strongly agree”; $a = .85, M = 4.27, SD = 0.83$).

4 This was precisely the aspect addressed with RDTP’s production team, so that it could be taken into account during the filming of its second season.

6. REFERENCES


