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# To Think or Not to Think: Two Pathways Towards Persuasion by Short Films on Aids Prevention

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Health messages are designed to stimulate an active cognitive process in those audiences generally with little involvement. The Elaboration Likelihood Model by Petty and Cacioppo sustains that subjects with high involvement and those with low involvement react differently to the persuasive message to which they are exposed. One efficient way to capture the attention of the low involvement audiences is to insert the messages within an entertainment context. Our study attempted to analyze affective and cognitive processes to explain the impact of these new formats, fictional shorts for HIV/AIDS prevention. A  $2 \times 2$  factorial design was used, with involvement in the AIDS issue (high/low) and the type of format (musical/dialogue) as independent variables. The finding showed the better the quality of the short (with dialogue style) the more negative affectivity was stimulated, also the more cognitive processing was induced, and a more favorable attitude towards preventive behavior was stimulated.

**Keywords** Health Communication, persuasion, information campaign, AIDS, reception analysis, experimental research.

#### Introduction

Using fictional shorts in AIDS prevention campaigns has been regarded as an alternative to the traditional dissemination of advertisements (Backer, Rogers, & Sopory, 1992; Igartua, Oria de Rueda, Páez, Corral, Alonso, Mayordomo, & Lana, 1999; Mohammed, 2001; Singhal & Rogers, 1999; Svenkerud, Rao, & Rogers, 1999). Study on how this type of format functions and is processed is needed not only for understanding how the persuasion process is produced, but also for making suitable designs and for planning preventive tasks (Nowak & Siska, 1995). Therefore, in our study we tried to analyse the affective and

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cognitive processes which explain the impact of these new audiovisual formats used for HIV/AIDS prevention. We also took into our consideration the psychosocial models of sociocognitive character and the research in health communication (Edgar, Fitzpatrick, & Freimuth, 1992; Elwood, 1999; Maibach & Parrot, 1995; Maticka-Tyndale, 1991).

Several previous empirical studies have analysed the factors that may combat the so-called "cognitive defenses" of the target population in terms of health campaigns, such as the bias of false consensus or *primus inter pares*, which is the tendency to consider that there is less personal risk than that of a normal or average person (Perloff, 2001), pointing that subjects, largely with low or no motivation or involvement in health issues, should be made involved affective and cognitively, at least "temporarily" during the reception of preventive communications (Flora & Maibach, 1990). Some strategies suggested are related to the use of new formats to induce or provoke a more persuasive response through combining entertainment with prevention (Singhal & Rogers, 1999).

To the designers of health messages the main goal is to stimulate an active cognitive process in audiences, who are generally passive and uninvolved. Parrott (1995) has pointed out that message presentation can affect both the amount and the type of processing that the subjects develop. In this respect, the author has suggested that motivation can be improved in the audiences exposed to the campaign information and, thus, more systematic processing occurs, when (a) the presentation of the contents is unusual, unfamiliar and novel (that means that the idea of introducing new formats in contrast with the classical advertising may be a worthy option), (b) the presentation contains characters and stories that are contrary to the viewer's expectations (this shows the importance of character construction and the way in which the story is told), and (c) both external and internal appeals are used to reinforce the subjects' awareness.

McGuire (1985) stated that a message must be paid attention to and understood in order for acceptance and retention to take place, which eventually would influence an individual's judgment and future behavior. In the case of a persuasive message, originality, novelty, and aesthetic pleasure are essential as the first step toward persuasion. On the other hand, the use of unexpected content that is discrepant with cultural expectations also is an efficient way to capture attention. According to a research study, this kind of message generates more active thinking than similar messages with conventional content (Parrott, 1995). Moreover, "linguistic strangeness" and breaking away from conventional scenarios are two typical procedures needed to cause an aesthetic impact (Páez & Adrián, 1992). These techniques are even more important in the case of dramatic audiovisual stimuli, like the fictional shorts used in our study, when it has to capture attention and make the viewer follow the plot for a longer span of time than required for a classical commercial advertisement. Most advertising and dramatic performance experts believe that portraying something negative with both humor and aesthetics is central to catching the viewer's attention and assuring message acceptance. Several studies also have confirmed that positive affectivity leads to higher message receptivity (Hale & Dillard, 1995).

Inserting the AIDS prevention messages into an entertaining context (Backer, Rogers, & Sopory, 1992; Singhal & Rogers, 1999) can be an effective way to capture the attention of those audiences with a low involvement in health issues or who are uninterested in the information used for prevention campaigns and engage them in preventive behavior. This can be achieved by using new communicative formats in which the use of condoms is inserted simply as a part of the script or sex scenario during foreplay. Such formats could enable us to make "product placements" and to promote "healthy passions" (Adelman, 1992), which in turn generate "positive attitudes towards sexual relationships including the use of condoms" and not just "positive attitudes towards condoms" (Kellar-Guenther, 1999).

Fictional stories about social problems like AIDS that work as "incidental persuasion machines" have proven to provide audiences with an opportunity to think about such issues. For example, *Philadelphia* was not only a successful film, but to many people it also triggered reflections on the AIDS issue regardless of the film's entertaining or aesthetic value. There is systematic evidence proving that exposure to entertainment programs, such as films and television series that deal with social problems, particularly AIDS, in a vivid and dramatized way can influence social knowledge as if these programs were educational sessions, thus provoking incidental social learning. In the referred example, exposure to this kind of entertainment program resulted in an increased perception of personal risk for acquiring AIDS (Synder & Rouse, 1995). In this respect, fictional films like *Philadelphia* convey information and stimulate reflection on issues usually neither perceived nor reflected upon by the public (Igartua & Páez, 1997).

In addition to the research studies and proposed theories of persuasion, which establish important background information, we will now examine the interplay between affective and cognitive processes as produced by dramatic audiovisual stimuli. This equally relevant field of study is the basis for our present research.

The current cognitive models, especially the one known as "Elaboration Likelihood Model" (Petty & Cacioppo, 1986), claim that even more than the message content itself, the main *mediating variable* is what actually generates the thinking elaboration level. The Elaboration Likelihood Model (ELM) by Petty and Cacioppo also poses two different routes responsible for changing attitudes by means of persuasive communications: one central processing route and one peripheral processing route. Attitude changing through the central route means that the recipient tries to evaluate the message critically and exhaustively, thereby establishing a more or less rational and consciously controlled process in which the individual focuses on the truthfulness or reliability of the message's arguments. In contrast, attitude changing through the peripheral route takes place when the message's arguments are accepted for reasons other than their validity. When peripheral processing takes place, an automatic, superficial, and quick processing occurs that focuses on contextually peripheral cues rather than focusing on the quality of the message's arguments. These two processing strategies referred to in the ELM make up two extremes of a continuum: the "elaboration" continuum. Petty and Cacioppo (1986) use the elaboration term to indicate the extent to which an individual thinks about the arguments related to the problem that a message contains. The term "elaboration" could bear a resemblance to the "reflection" process, through which cognitive responses are generated as a result of the exposure to a persuasive message (Petty, Cacioppo, Strathman, & Priester, 1994). The likelihood for producing this elaboration depends on two factors: 1) the motivation, e.g., the involvement level in the issue, and 2) the capacity (or ability) to process the message. In high likely elaboration situations (in which both levels of motivation and processing capacity are high), a reflective and evaluative process over the arguments in the message will be triggered. Thus, the individuals' inner dialogue about the message will generate the polarity of their cognitive responses, which, in turn, will predict the change of their attitude. In contrast, in low likely elaboration conditions (due to low motivation level and less processing capacity), a peripheral processing route will activate. In such cases, the individual will not evaluate the message's arguments by their quality, but will only follow the peripheral cues present in the context (positive or negative) in which the communication takes place. The person receiving the communication may change his/her attitude in many different ways without getting deeply involved in an elaboration process. Definitively, the ELM states that an attitude change can be produced without an exhaustive processing of a message's arguments, because the individuals either rely upon the use of the simple decision-making rule that "the opinion of experts can be trusted," or the attitude object is displayed repeatedly with a stimulus that induces an obvious affective response—for instance, some tissues are matched with a cute, quiet Persian cat (Breckler, 1993; Chaiken & Stangor, 1987; Eagly & Chaiken, 1984).

Petty and Cacioppo (1986) have tested empirically that subjects with high or low involvement in a certain issue or social object react differently to the persuasive messages. For example, it has been observed that for subjects involved in the AIDS issue, who are thus motivated to pay attention and to reflect on the message's arguments, the effective campaigns were those using rational messages with solid arguments. On the other hand, vivid emotional appeals were more effective on subjects with low involvement in such issues (Flora & Maibach, 1990).

The ELM also has suggested that moods may play different roles in persuasion in terms of the subject's elaboration likelihood (Petty, Cacciopo, Sedikides, & Strathman, 1988; Petty, Cacciopo, Strathman, et al., 1994; Petty, Gleicher, & Baker, 1991; Petty, Priester, & Wegener, 1994; Petty, Schumann, Richman, & Strathman, 1993; Wegener, Petty, & Klein, 1994). Like any other relevant variable, e.g., the source credibility, positive or negative mood is assumed to somehow impact the persuasive process through various mechanisms: it can act as an "argument," it can be conceived as a "peripheral cue," it can influence "the amount of elaboration," or slant the type of generated cognitive responses. However, the mediation model by Kepferer (1996) offers a more thorough explicative frame for understanding the impact of affective processes on persuasion, especially when the messages, like those used for the present research, are short fictional stories. For this reason, the aesthetic-affective impact should be looked into in more depth. According to the model of dual mediation (Kepferer, 1996), affectivity plays a role as a persuasion promoter which can work in different ways. In this respect, we have to differentiate between the two types of affective reactions observed in the present study: a) those associated with message evaluation and aesthetic impact; and, b) the emotions experienced by the individual during active message reception.

In the present study we compared the efficiency of two different prevention formats based on fictional shorts that were used quite successfully in a French AIDS prevention campaign in 1994 and which also have been analysed in previous studies (Igartua et al. 1999). In this research we worked experimentally with a solely musical format which was supposed to activate a peripheral processing pathway, and a dialogue format which would activate a central processing pathway. Both formats are assumed to differ primarily in the way that the prevention message is "framed" (see references on framing, e.g., Davis, 1995) as well as in their affectivity. But personal involvement in the issue, as the ELM poses it, would moderate such persuasive impacts. That means that the psychographic variable, "involvement in the issue," should be brought into consideration when making designs or targeting any health information campaign. A similar approach to the one adopted in this study, such as the interest in segmenting the audiences, had also been used and recommended by Flora and Maibach (1990), Maibach and Flora (1993), Slater (1995), Walters, Walters, and Hornig (1999), and so on.

#### Method

#### **Subjects**

All of the 137 participants in this experiment were undergraduate students of Social Sciences in Salamanca University. Their average age was 21.26 years (range 18–30), and 70.1% were female.

#### **Design And Procedure**

A between group 2 (involvement in the AIDS issue, two levels: high/low)  $\times$  2 (type of format, two levels: musical/dialogue) factorial design experiment was conducted.

The prevention shorts viewing took place in the same classroom where students attend their lectures. The study was introduced as an assessment on audiovisual materials for AIDS prevention. Due to the difficulty of completely randomizing the experimental conditions, especially the exposure to the films, the present study has a quasi-experimental character.

#### **Instruments**

A questionnaire containing different parts was designed: instructions for manipulating involvement in the AIDS issue, the dependent variables, and also two additional questions were included to check the experimental manipulation efficiency.

#### Dependent Variables

Cognitive responses to the preventive short films. The thought-listing technique was used in order to register the cognitive responses to the short films (Shapiro, 1994). Participants were asked to write down every thought, idea, or reflection evoked by the film they had just watched. At the end of the experimental session these responses were categorized by the participants themselves using a scale of 7 grades, from -3 (= very negative) to 3 (= very positive), which is intended to obtain a polarity indicator of each registered idea. Finally, an individual polarity indicator was produced by summing up the grade of each idea. The sum was later divided by the total number of registered responses.

Attitude towards the prevention message. This was evaluated by three items: how convincing the message was considered (0 = not at all; 10 = very), whether the message stimulated a favorable attitude towards preventive behavior (0 = not at all, 10 = very), and the individual's intention for future behavior following the recommendations of the film (0 = never; 10 = always).

Aesthetic evaluation of the prevention shorts. This was done by means of two scales. The first consisted of 4 items: participants were asked to grade how much the liked the film, the film *interest*, *novelty*, and *impact*, using an intensity scale of 11 grades (0 = not any; to 10 = very much). Similarly, a semantic differential scale was used for aesthetic evaluation, consisting of 6 bipolar scales of 7 grades each. At both ends of each scale a pair of antonyms was laid out, like "bad-good", "lots of fun-boring", "lovely-ugly", "incomprehensible-comprehensible", "sad-cheerful" and "informational-emotional". The adjectives used to create this semantic differential were chosen with reference to previous studies on advertising by the researchers who have especially analyzed the attitude toward the ad  $(A_{ad})$  (Gardner, 1994; Olney, Batra, & Holbrook, 1990).

Emotions experienced while viewing the films. A scale of 9 items was used, and each item described an emotion: happiness, sadness, anger, fear or anxiety, disgust, guilt, shame, pride, and attachment or attraction. Participants were asked to indicate how much the film had made them feel those emotions (1 = not at all, to 5 = very much). Then 2 emotion indicators were produced, one for positive emotions, like happiness, pride, and

attachment or attraction (Cronbach's alpha = 0.57), the other one for negative emotions, like sadness, anger, fear or anxiety, disgust, guilt, and shame (Cronbach's alpha = 0.72).

Cognitive inducement. To evaluate the activation level of semantic memory, participants are asked to respond "how the short film made you think about the dealing issue" (0 = not at all, 10 = very much).

#### Variables of Experimental Check

Perception of argument quality in the shorts. By means of a scale of 11 grades (0 = not any quality, 10 = lots of quality), participants were asked to grade the overall argument quality in the shorts (whether they were *convincing*, *consistent*, and *adequate*).

Involvement in AIDS issue. This was valued by one item: "Do you consider that the film you have just seen deals with issues which are relevant or important to you?" Participants were asked to grade the level of relevance through a scale of 11 grades (0 = not important at all to me, to 10 = very important to me).

#### Materials Bound to the Independent Variables

To Petty and Cacioppo (1986), issue involvement is a situational variable, so it can be manipulated in an experimental way. The manipulation of this variable was done by providing information about the alleged risk of HIV/AIDS infection (high or low) among individuals aged 18–30. This procedure, known as *manipulation by instructions*, is widely used in Social Psychology and in Media Psychology and Communication as well (e.g., see Davis, 1995; Maibach & Flora, 1993; Igartua & Páez, 1998). In this context, we used two kinds of instructions which were printed on the cover page of the questionnaire and were read by the participants immediately after they were given the questionnaire and just before viewing the shorts.

The instruction text with high involvement was as follows:

The results of the latest epidemiological studies carried out in our country were presented at the Fifth National AIDS Conference in April this year, which say that young people aged 18–30 in Spain constitute a group of very high risk in terms of HIV/AIDS infection, given the fact that their habits of sexual behavior have seldom been modified in the last few years.

While the other instruction text with low involvement was as follows:

The results of the latest epidemiological studies carried out in our country were presented at the Fifth National AIDS Conference in April this year, which say that young people aged 18–30 in Spain constitute a group of very low risk in terms of HIV/AIDS infection, given the fact that their habits of sexual behavior have been substantially modified in the last few years.

As for the audiovisual materials, we used two AIDS preventive shorts which had also been used in the 1994 French campaign as we mentioned above ("3000 lines against one virus"). Due to the lack of similar production in Spain, these French-made short films for AIDS prevention were used for the experiment. In spite of the fact that the films had been dubbed and showed on Euskal Telebista (ETB), a local TV channel in northern Spain which reaches only the Autonomic Community of Basque Country and has no coverage in the area of Castilla and León where the experiment took place, the subjects who

participated in the experiment could have been previously exposed to these films. However, when questioned, no participant stated that they had viewed the short films before the experiment.

In a previous content analysis study, we obtained 17 of 30 shorts which were designed originally, and were able to characterize the preventive message and other characteristics of each short film, such as the production and narrative structure. Similarly, a previous evaluation study, with 93 subjects, with an average age of 19 and 51.1% male, enabled us to test the film's potential to appeal, to be enjoyed, and its affective and cognitive inducement. In this study, it was proven that the short entitled "Earlier yet later", which used a dialogue format to frame or to reason in favor of condoms, had been more liked (t(92) = -6.84, p < .001) in comparison to the short entitled "At dance", which used a musical format to present the arguments. It also induced a greater affective (t(92) = -14.94, p < .001) and cognitive (t(92) = -14.27, p < .001) impact (Igartua, Oria de Rueda, et al., 1999). Lastly, in a later pilot study, a sample of 30 subjects with an average age of 20.70 and 53.3% female was chosen to view both shorts and to assess the average quality of their respective arguments using a scale of 11 grades, from 0 = not anyquality, to 10 = very high quality. The participants assessed the quality of the prevention arguments presented in the film "Earlier yet later" to be higher (average = 8.70) than in the film "At dance" (average = 6.23) (t(29) = -7.87, p < .001). Therefore, from the results of the content analysis, the evaluating study, and the pilot study, we could suggest that the short "Earlier yet later" presents arguments of higher quality and would be suitable to persuade individuals through the central route. In contrast the short "At dance," with the three key players of music, setting appeal, and character appeal, provided arguments of less quality and would be designed to persuade through a peripheral route. In addition, both shorts had similar lengths, numbers of shots, editing rhythms, ages of the main characters, types of alluded sexual relationships, and preventive focal points, namely the use of condoms on short-term heterosexual relationships.

#### **Results**

#### Testing of Experimental Manipulation

First, we analyzed how a suitable manipulation of independent variables had taken place. Participants considered the short in a dialogue format "Earlier yet later" to present preventive arguments of higher quality (M = 7.28) than the musical format "At dance" (M=6.10; t(134)=-3.89, p<.001). Nevertheless, subjects receiving instructions to induce a high involvement did not differ significantly from the subjects who received instructions for inducing a low involvement in the AIDS issue (M = 7.81 versus M = 8.04, respectively, t(135) = 0.73, p = .462). We may draw the conclusion that the framing of the preventative message was manipulated successfully, since the participants "detected" that the quality of the two plots was different, which aligned with the previous studies and the pilot study. But we failed to manipulate the relevance of involvement in the AIDS issue. To this we may suggest a few explanations: a) The subjects' involvement in the AIDS issue was already high enough, so it produced a "ceiling effect," considering the median in this variable was already 8.00 on a theoretical scale of 0-10. It was very difficult to manipulate this situational variable perhaps because a simple procedure based on reading information might not have been effective for this experiment. b) The reading process was not controlled, so it is probable that not every subject actually did read the instructions or might not have done it in a proper way. c) The item used for evaluating the experimental manipulation efficiency might not have had enough validity and sensitivity.

TABLE 1 Characteristics of the Prevention Shorts Used in the Research

Criteria	Earlier yet later	At dance
<ul> <li>Length in seconds</li> </ul>	266	169
<ul> <li>Total number of shots</li> </ul>	44	44
• Number of shots with camera in		
movement	14	18
<ul> <li>Editing rhythm 1 (shot number</li> </ul>		
by second)	0.17	0.26
• Editing rhythm 2 (% of shots with		
camera in movement)	31.82	40.91
• Type of narrative structure	Realistic, dramatic, fictional short	Flash, fictional short
<ul> <li>Production strategy</li> </ul>	Naturalism	Sophistication
<ul> <li>Lighting</li> </ul>	Low key	Low key
<ul> <li>Age of the characters</li> </ul>	19–30 years	19–30 years
<ul> <li>Type of alluded sexual relationships Only heterosexual</li> </ul>	Only heterosexual	Only heterosexual
<ul> <li>Focal point of prevention</li> </ul>	Use of condoms	Use of condoms
<ul> <li>Number of reinforced benefits</li> </ul>		
of condoms	4	3
<ul> <li>Number of criticisms on cost</li> </ul>		
of condom	3	3

unnecessary. To this, the main character responds prevention. At the climax the main character gets "if he thinks he is protected against misfortunes" thinks he is invulnerable to diseases) about AIDS cross because his friend mentions that in spite of managed to get him because he considered them character (who will be revealed as HIV positive at the end of the short) ends up telling a friend and "if he can detect who has or who does not spending a weekend with a new girl friend, he didn't use the condoms the main character had (who looks shy but shows self-confidence and It is set in a high school courtyard where the "dates" and weekend activities. The main characters exchange opinions about their nave AIDS at a simple glance."

We are in a youth amusement atmosphere.

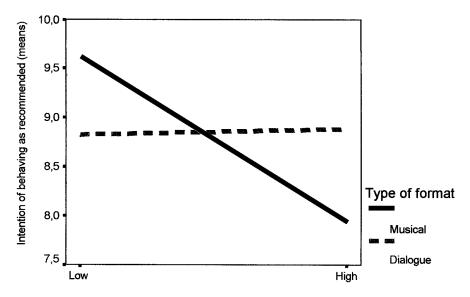
The setting is along a succession of subway tunnels arranged for dance floors. A crowd of young people rrive there to enjoy themselves with music and the atmosphere. The music is continuous as the action occurs and no words are spoken by any characters. Everything is expressed in very clear images, mainly about how to "hit on" opposite sex. At the end of the short it is reinforced how important it is to carry condoms and to know how to use them. As a banana was displayed on the very stage to show how a condom must be put on, it is stressed that the condom can make erotic foreplay easier.

Precisely due to this last explanation, we decided to bring the influence of personal involvement on the dependent variables into consideration.

# Impact of Personal Involvement and Type of Preventive Message in the Dependent Variables

We tested the impact of issue involvement and the impact of the type of preventive message frame on the dependent variables, and for this we used a two-way analysis of variance. The only significant interaction effect between both independent variables was produced in the variable "intention of future behavior following the recommendations given in the short" (F(1,133) = 4.04, p < .05). As foreseen, subjects with lower involvement exposed to the short in musical format showed more behavioral intention (M = 9.63) than those with higher involvement (M = 7.94). However, an inverted model was obtained for those subjects exposed to the short with the dialogue format, since the subjects with higher involvement (M = 8.89) showed more intention for preventive behavior than those with low involvement (M = 8.82).

Involvement in the AIDS issue did not affect other dependent variables significantly. Nevertheless, the type of preventive format or framing did induce a resulting model in accordance with what was hypothesized (see Table 2). The musical format (At dance) generated more positive cognitive responses than negative ones: that means it induced a greater polarity within the cognitive responses (F(1,120) = 2.81, p < .10). As it was evaluated to be more cheerful (F(1,126) = 89.53, p < .001), it therefore induced more positive emotions (F(1,122) = 6.30, p < .05), particularly happiness (F(1,127) = 15.37, p < .001) than the dialogue format. In contrast, the dialogue format ( $Earlier\ yet\ later$ ) was better liked (F(1,127) = 6.21, p < .05) than the musical format. It was also judged to be more interesting (F(1,128) = 10.51, p < .01) and perceived as more impacting (F(1,125) = 9.60, p < .01). Besides, it was largely considered "good" (F(1,128) = 3.66, p < .10), more comprehensible (F(1,125) = 5.32, p < .05), but induced more negative emotions (F(1,125) = 77.97, p < .001), especially sadness (F(1,128) = 105.52, p < .001), anger (F(1,126) = 37.67, p < .001), fear or anxiety (F(1,129) = 51.10, p < .001), and guilt



**GRAPHIC 1** Effects of involvement in AIDS and the type of format on preventive intention.

TABLE 2 Impact of the Type of Preventive Format on the Dependent Variables

Dependent variables	Type of format			
	Musical	Dialogue	F	p
Polarity of the cognitive responses	1.11	0.69	2.81	.096
Attitude towards the preventive message:  • The message is convincing  • Stimulates a favorable attitude toward	6.07	8.23	36.94	.001
<ul><li>attitude toward</li><li>preventive behavior</li><li>Intention for future</li><li>behavior following the</li></ul>	6.81	8.43	19.92	.001
short recommendation	8.81	8.86	0.26	.871
Aesthetic evaluation:  I liked it It's interesting It's novel It's impacting It's good It's boring It's ugly It's comprehensible	6.34 6.77 6.14 5.67 4.77 3.48 3.86 5.82	7.11 7.85 5.71 6.98 5.26 3.20 3.94 6.30	6.21 10.51 0.76 9.60 3.66 0.97 0.12 5.32	.014 .002 .384 .002 .058 .325 .727
• It's cheerful	5.48	3.25	89.53	.001
• It's emotional	3.31	2.85	2.16	.143
Experienced emotions:  • Total positive emotions • Total negative emotions • Happiness • Sadness • Anger • Fear or anxiety • Disgust • Guilt • Shame • Pride • Attachment or attraction	2.14 1.15 2.56 1.29 1.15 1.21 1.14 1.05 1.08 1.55	1.78 1.86 1.80 3.00 2.23 2.34 1.20 1.40 1.14 1.35	6.30 77.97 15.37 105.52 37.67 51.10 0.53 9.73 1.04 1.35	.013 .001 .001 .001 .001 .001 .468 .002 .310 .246
Cognitive inducement (activation of semantic	6.60	7.00	11.00	001
memory) N	6.69 68	7.96 69	11.28	.001

(F(1,127) = 9.73, p < .01). Moreover, it induced more activation of semantic memory (F(1,132) = 11.28, p < .001), its preventive message was considered more convincing (F(1,133) = 36.94, p < .001), and finally stimulated a more favorable attitude towards preventive behavior (F(1,132) = 19.92, p < .001).

The personal involvement in AIDS, evaluated by the item "Do you consider the short you have just seen to deal with issues that are relevant or important to you?" was not significantly associated with the total number of cognitive responses generated to the short (r = -.03, p = .351). Neither did the higher involvement group produce more cognitive responses than the lower involvement group (t(123) = -0.56, p = .573).

#### Internal Analysis: Framing of the Preventive Message and Persuasion Processes

Given the facts that both preventive formats presented arguments of different quality and that the higher quality short (*Earlier yet later*) produced a pattern of evaluation, of emotional and cognitive inducement different from the pattern produced by the musical format which had less argument quality (*At dance*), we proceeded to analyze the processes of persuasive impact in both conditions by analyzing the association between the dependent variables for the subjects exposed to both preventive messages in order to detect the existence of the differing persuasion pathways as predicted by the ELM by Petty and Cacioppo (1986).

Regarding the musical format, we observed that the polarity of the cognitive responses were associated congruently with the obtained evaluation of the short, such as judgments of being good (r=.51, p<.001), lovely (r=.29, p<.05), comprehensible (r=.24, p<.05), and convincing (r=.52, p<.001). The polarity of the cognitive responses were also associated with greater enjoyment (r=.41, p<.01) and with the judgments as interesting (r=.47, p<.001), novel (r=.36, p<.01), and impacting (r=.33, p<.01). The polarity was also associated with both positive (r=.38, p<.01) and negative (r=-.26, p<.05) emotional impact. At the same time, the positive emotion impact was associated with convincing judgment (r=.37, p<.001) and with cognitive inducement (r=.39, p<.001). Cognitive or semantic memory inducement was also associated with the consideration of the short to stimulate a favorable attitude towards preventive behavior (r=.60, p<.001).

As for the dialogue format, we observed that the polarity of the cognitive responses were not associated congruently with the other dependent variables. Instead, the negative emotion impact was associated with a greater cognitive inducement (r = .18, p < .10). The activation of semantic memory, in turn, was associated with *convincing* judgment (r = .30, p < .01), also with regard of the short to stimulate a *favorable attitude* towards preventive behavior (r = .30, p < .01), and with intention for future behavior following what was recommended in the short (r = .21, p < .05).

#### Discussion

The first result we highlight is that issue involvement does not modify the impact of the preventive shorts with different framing. In this experiment, the role of issue involvement does not appear to be as relevant as defended by the ELM and tested in other studies on campaigns against AIDS (Flora & Maibach, 1990). Similar results were obtained in a previous study on commercial advertising (Igartua, Corral, & Villar, 2000).

The second result, quite unexpectedly, is that the format of less quality is the one that stimulated a greater number of positive cognitive responses; this is clearly in disagreement with what Petty and Cacioppo (1986) sustained in their Elaboration Likelihood Model. Since neither the "objective" of the cognitive responses nor their

quality was evaluated and because no positive association with issue involvement was observed, we think that the generated cognitive responses might not focus on the message content (arguments) as much as on the formal aspects of the shorts, such as how the films were made. As a matter of fact, the production of the musical format was rather complex in style, since it was strongly supported by a certain sophistication in contrast with the dominantly natural style in the dialogue format (Igartua, Oria de Rueda et al., 1999).

The impact of the preventive message framing was particularly significant since the format with a dialogue style and higher quality arguments was valued more positively. In the same way, it stimulated more negative affectivity and induced more cognitive processing. It was judged to be more convincing and to stimulate a more favorable attitude towards preventive behavior.

In sum, although the evidence is correlational in this respect, we suggest two different pathways are likely to have taken place in our study. First, the preventive short that adopted a musical format with less quality arguments yet which based its presentation style on peripheral cues, such as the music, the setting, and the characters' appeal, seems to have activated a peripheral pathway of processing. This means that the positive feeling and the positive cognitive responses account more for the impact on the dependent variables. Second, the dialogue short (with a dialogue frame with higher quality arguments basically presented in a direct way through dialogue between characters) is likely to have activated a central pathway of processing, since the negative affectivity was associated with cognitive inducement of semantic memory. Moreover, the evaluation of its preventive message as *convincing* also was associated with the dependent variables. In other words, the two messages may be efficient in provoking preventive intentions, the strategy of these provocations should be explained by different processes of persuasion. And this has clear implications for the design of AIDS prevention materials.

Before ending the discussion of the results, we have to point out a few limitations of this study and establish some guidelines for further studies.

In the first place, the procedure that we used to manipulate involvement in the AIDS issue was not as efficient as expected. In this sense, instead of questioning the ELM theory validity (when claiming that personal relevance or involvement moderates the impact of persuasive message with high as well as low quality), we are critical of the procedure we followed. One of the explanations for the failure of manipulating AIDS involvement may be that the participants in the experiment already had enough knowledge about AIDS or personal experience with this issue. This prior knowledge or experience might lead them to evaluate the AIDS information provided critically. To avoid this, in future studies researchers should test the prior levels of knowledge and personal experiences of the subjects. New designs of procedure for manipulating personal relevance or involvement would also be recommended, since issue involvement is defined in the ELM as a situational variable that can moderate the impact of persuasive messages (Petty & Cacioppo, 1986; Flora & Maibach, 1990). Although no significant difference has been observed in the dependent variables in relation to gender, it would be convenient to consider the influence of the gender variable when analyzing the process of influence of the prevention formats based on entertainment.

The second limitation of this study is the use of French produced short films to test their persuasion impact on Spanish individuals. To a certain extent, this ensured that there was no chance for the participants to pre-expose themselves to the messages, nevertheless, the culture cues might have interfered in the results. If Spanish made prevention films with cultural closeness had been used, the results might have turned out differently. Therefore, we suggest that in future studies researchers should examine the effects of

"cultural proximity" (Larsen & Laszlo, 1990) over the persuasive potential in this type of prevention format.

The title of the present work may suggest that there are not only two different but also antagonistic ways of persuasion: arousing reflection (to think) versus not arousing it (not to think). Petty, Cacioppo, Strathman, and Priester (1994) explain in their work "To think or not to think: Exploring two routes to persuasion" that the central route involves an exhaustive processing of arguments in the message, whereas the peripheral route points to a lesser cognitive effort to analyze these arguments. Though the central route the individuals produce cognitive responses stemming from a careful evaluation of the argument quality (e.g., weighing the extent to which what the characters in the AIDS prevention short films say or do is suitable, convenient, or believable). In contrast, through the peripheral route, behaving as cognitive misers, the individuals can also assess the message cognitively except that they pay attention to the less central elements, probably those related to the formal aspects, the style and the so-called peripheral cues or signals of the persuasive messages (e.g., the characters' appeal or the music in the films). But the authors judge that both routes present the two extremes of a continuum which seldom occurs in its pure state. In other words, when the viewers perform argument assessment they also evaluate the formal aspects and the message style.

Some conclusions are drawn from the correlation results of data analysis, so they should be read cautiously. For further studies, researchers should work out the affectivity role in the persuasive process beyond correlation analyses. It is necessary to determine how the moods influence the information processing style in an experimental study with formats that combine prevention and entertainment. In this respect, researchers should observe how the "incidental" persuasive processes occur when the messages combination of education and entertainment are processed. They might be of a different nature from those occur with messages designed to persuade as first priority. It would be illustrative to analyze how the individuals' identification with the characters influences the central or peripheral processing and the impact of preventive messages (Singhal & Rogers, 1999). The ELM establishes that positive evaluation of the characters may be associated with a more peripheral processing of preventive messages. However, we consider the probability that the subjects' identification with the characters causes a more affective processing in them, producing a greater temporary involvement when receiving messages and leading to a more systematic cognitive processing rather than a heuristic one. In sum, the analysis of the mediating processes that account for the impact of the messages with prevention-entertainment association offers a relevant field for further health communication research.

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