

Full paper

Tell me your Successful Story with Tobacco! Indirect Effects of Narrative Voice and Behavioral Audience-Character Similarity on the Intention to Quit Smoking

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Abstract

Smoking is linked to multiple health problems, but it is also the biggest preventable cause of premature death. Therefore, an important goal in health communication is to improve the effectiveness of campaigns targeted to smokers. The present study focuses on smoking prevention using narrative messages in which a former smoker described the process of quitting smoking and the improvements experienced since then. The role of two narrative devices was analyzed in an online experiment ($N = 680$) with a 2 (narrative voice: first vs. third-person message) x 2 (audience-character behavioral similarity: low vs. high) between-subjects factorial design. Results showed that the first-person narrative with a high-similar protagonist condition induced the highest levels of identification. Moreover, mediational analyses showed that identification with the protagonist, reactance and counterarguing were significant mediators. The present work opens an innovative line of research on the construction of narrative messages for smoking prevention.

Keywords: health communication, smoking prevention, narrative persuasion, behavioral character-audience similarity, narrative voice.

Tobacco use has been linked to multiple health problems, such as respiratory and cardiovascular diseases, and different types of cancer (American Cancer Society, 2018; World Health Organization, 2017). That said, smoking is also the leading *preventable* cause of premature death. Consequently, improving the effectiveness of smoking cessation campaigns is an important goal in public health management and health communication. The present study focuses on smoking prevention using *narrative messages*, i.e. personal stories of former smokers that serve as a model for changing attitudes and behaviors of current smokers (Dunlop, Wakefield, & Kashima, 2010; Kim, 2019; Niederdeppe, Heley, & Barry, 2015).

Narrative Messages for Smoking Prevention

To limit the scope of this study, firstly, we must define what a narrative is. There are several definitions of the term, but they all have in common the idea of a message in which there is (at least) one character who experiences or faces (at least) one event or issue in a specific spatiotemporal framework (Green, 2006; Kreuter, Green, Cappella, Slater, Wise, Storey, Clark, O’Keefe, DeErwin, Holmes, Hinyard, Houston, & Woolley, 2007; McDonald, 2014). The character is a human being who acts motivated by certain intentions or reasons and who aims to reach a goal. The event or issue that the character is facing is a transition between two states that are temporary and causally related. However, most narratives are composed by multiple events that are causally related to each other. Having said that, although events can be presented in non-chronological order, the underlying structure will be a cause-effect relationship (or action and reaction). This relationship connects the narrative events and the characters into a structure that takes form of a story or narrative. These elements

(characters, events, space and time) convert narratives into specific and concrete messages, that is, “stories of particular cases” in which events involving one or several people in a specific area happen. Focusing on specific particular cases contrasts with, for instance, scientific explanations, which give more general and abstract information based on multiple cases. Thus, non-narrative messages give more general and abstract data that is presented as information (“every cigarette you smoke increases your chance of getting lung cancer”) or in statistical form (providing quantified data about the prevalence of a phenomenon, “8 out of 10 people with lung cancer will die over the next three years”), compared to the experimental style of the narrative (“the lung cancer chemotherapy affects all your body, it is a living death”).

In the context of our project, we will define narrative messages for smoking prevention as short personal stories told by a former smoker who shares details about their experience with tobacco. A smoking prevention narrative refers to a former smoker’s personal story which aims to serve as a model for changing attitudes, beliefs and behaviors of current smokers (e.g., the *Tips from Former Smokers* campaign, developed in the United States by the Centers for Disease Control and Prevention, CDC). Therefore, these narratives refer to two different *states*, life as a smoker and life after quitting smoking, that are connected with each other in *time and causal sequence*. Furthermore, the narrative can refer to aspects such as the reasons that led the character to stop smoking (*intentions and goals of the character*), the previous degree of tobacco dependence (how often they smoke), the number of times that they tried to stop smoking, the actions taken to quit smoking, the benefits of quitting smoking, and the disappearance of smoking negative effects when quitting smoking. The goal of a smoking prevention narrative is to induce audience or target audience’s desire to quit smoking, to reinforce their

self-efficacy expectations and to convince them of the effectiveness of the promoted preventive response (quit smoking).

Narrative messages are increasingly used in health communication to achieve public health objectives, such as diseases detection and prevention (Frank, Murphy, Chatterjee, Moran, & Baezconde-Garbanati, 2015; Green, 2006; Jensen, Yale, Krakow, John, & King, 2017; Thompson & Kreuter, 2014). It has been found that health narrative messages can promote beliefs and consistent attitudes changes, as well as healthy behaviors (De Graaf, Sanders, & Hoeken, 2016). In the case of smoking prevention, in recent years there has been a growing body of research that shows the effectiveness of narratives (De Graaf, van den Putte, Nguyen, Zebregs, Lammers, & Neijens, 2017; Dunlop et al., 2010; Kim, 2019; Kim, Bigman, Leader, Lerman, & Cappella, 2012; Kim & Lee, 2017; Kim, Shi, & Cappella, 2016; Williams, Green, Kohler, Allison, & Houston, 2011).

Meta-analysis studies show that narrative interventions have significant effects on the dependent variables considered (on beliefs, $r = .17$; attitudes, $r = .19$; intentions, $r = .17$; and behaviors, $r = .23$; Braddock & Dillard, 2016). However, there is also a significant variation in these narrative intervention effects (Shen, Sheer, & Li, 2015; Zebregs, Van den Putte, Neijens, & De Graaf, 2015). These findings suggest that, even if narrative messages can be a promising health communication tool, not all narratives are effective. Thus, it is crucial to find out which narrative *ingredients* are more effective from a persuasive point of view. That is precisely one of the main goals of the present study.

Explanatory Processes of Narrative Persuasion

A second goal of the present study is to understand and explain the processes or mechanisms responsible for the persuasive impact of narrative messages for smoking

prevention. The main theoretical models of narrative persuasion are the Transportation-Imagery Model by Green and Brock (2002), the Extended Elaboration Likelihood Model (E-ELM) by Slater and Rouner (2002), and the Entertainment Overcoming Resistance Model, (EORM) by Moyer-Gusé (2008). In this context, the main processes studied are identification with the protagonist, narrative engagement or transportation, counterarguing and reactance.

Identification is an imaginative process that implies a gradual loss of self-awareness and the assumption of the emotional and cognitive point of view of the narrative's protagonist (Cohen, 2001; Igartua, 2010). Narrative transportation is a psychological process that implies an immersive or engaged state in the story or narrative (Busselle & Bilandzic, 2009; Green & Brock, 2000). Counterarguing is a process of making critical assessments during the exposure to a message (and that implies thinking negatively about the persuasive or preventive proposal). It has been formally defined as the "generation of thoughts (or cognitive answers) that explicitly refute a message's intended persuasive theme" (Niederdeppe, Kim, Lundell, Fazili, & Frazier, 2012, p. 758). Reactance is a second process linked to the *resistance* against a persuasive attempt. It is activated when the individual feels their freedom of choice is being threatened (Rains, 2013).

Hence, a distinction is made between two types of mediating processes: a) those which are directly connected with the impact of the message's characteristics (i.e., identification with the characters and narrative transportation); and, b) those which explain why people involved with narratives and characters are persuaded, as a result of the counterarguing and reactance processes. At the beginning of the causal chain, identification and narrative transportation are the most relevant processes (*primary mediators*), since they initiate the process that is going to facilitate

the persuasive impact through the reduction of counterarguments and reactance. Thus, counterarguing and reactance are considered *secondary mediators* (Banerjee & Greene, 2012; Shen, Seung, Andersen, & McNeal, 2017).

The model EORM by Moyer-Gusé (2008) indicates that identification and narrative transportation reduce counterarguing and reactance. This is because people who are involved with the narrative let themselves be carried away by the story (and experience fun and entertainment). This weakens any stance or critical attitude towards the message (since they are processes incompatible with fun or entertainment). Nonetheless, empirical evidence on the issue is inconclusive. For example, Moyer-Gusé and Nabi (2010) found that transportation led to greater counterarguing. On the contrary, identification reduced such reactance against the message.

Notwithstanding, since narrative transportation and identification with the characters are relevant processes for changing attitudes through the consumption of narratives, nowadays research focuses on finding out how to increase such processes. That is, finding which variables related to the characteristics of the characters or to the mode of narrative presentation have an effect on such processes and, indirectly, on attitudinal variables (De Graaf et al., 2016). The present study focuses precisely on the study of two factors that may increase identification and narrative transportation: audience-character similarity and narrative voice or perspective from which the story is told.

Similarity to the Protagonist

Similarity to the protagonist occurs when the individual who is exposed to a narrative message shares certain trait with the protagonist. Similarity can be based on objective traits (demographic aspects, such as gender and age), but also on psychological or subjective features (such

as personality, beliefs, opinions, values and biographical experiences). It is assumed that “if there is a considerable social distance between the audience and the characters (...) persuasion is less likely to occur” (Walter, Murphy, & Gillig, 2018, p. 32). Nevertheless, empirical evidence on the effect of similarity brings inconsistent results. Tukachinsky’s review (2014) shows that the manipulation of similarity (in objective traits) increases narrative transportation and the perception of similarity, but not identification.

It is worth considering, however, that similarity is a complex construct with several dimensions that has not always been manipulated in the same way, which could explain the inconsistent results. Thus, Tukachinsky’s review (2014) only considered studies in which similarity had been manipulated based on demographic traits, such as gender, age or ethnic origin (Chen, Bell, & Taylor, 2016, 2017; Cohen, Weimann-Saks, & Mazor-Tregerman, 2018; Kim, 2019). In the present study we introduce a new dimension that is relevant for smoking prevention: *behavioral similarity* considering the degree of tobacco dependence. To manipulate similarity in this way, information about the degree of tobacco dependence of both the protagonist of the narrative and participants were taken into account. Literature on tobacco dependence shows that success factors for quitting smoking include, among others, the *severity of the dependence* (number of cigarettes per day, score on the Fagerström test) (Moreno & García, 2000).

Having said that, it is also possible that similarity will only influence identification (and transportation) under certain conditions of reception (Kaufman & Libby, 2012). Consequently, it is crucial to continue delving into this research area and to explore in which *specific conditions* the effect of similarity can be increased. In the present study, we propose narrative voice as one these conditions.

Narrative Voice

Narrative voice or point of view refers to the narrator's perspective and from which the story is told: first, second or third person (Chen et al., 2017; Christy, 2018; Nan, Futerfas, & Ma, 2017). *First-person* narratives focus on the protagonist's feelings and thoughts. They do so by assuming the first-person voice, which leads to the use of first-person pronouns, such as "I", "my", and "me". Moreover, the narrator is involved in the story and expresses their view or their direct experience on an issue (e.g., "I felt bad for smoking", "I had always thought that I would never be able to quit smoking"). *Third-person* narratives have a narrator who is not a character in the story and tells the character's experience from an external perspective or from the viewer's perspective. This way, characters are referred by their names or as "he" or "she", i.e. third person pronouns, (e.g., "John felt bad for smoking", "John had always thought that he would never be able to quit smoking"). Finally, *second-person* narratives cast the reader as the protagonist (e.g., "You felt bad for smoking"; "you had always thought that you would never be able to quit smoking"). The second person perspective is useful for developing materials, such as guides, instruction manuals and self-help books, but it is rarely used in narrative health campaigns (Christy, 2018).

The use of first person facilitates audience members taking the character's perspective and this is a critical dimension in the identification with the characters. Moreover, neuropsychological research shows that first (versus third) person narratives are processed differently at a neural level (Van Krieken, Hoeken, & Sanders, 2017).

Chen et al. (2016) state that narrative persuasion research has given little attention to the effect of narrative voice, despite it being a relevant formal feature for the development of narrative

messages for smoking prevention (e.g., *Tips from Former Smokers* campaign). Thus, de Graaf et al.'s review (2016) analyzed 153 experimental studies on health-related narrative persuasion and it only identified four studies that had manipulated this feature (and only one of them focused on smoking prevention). This review stated that first-person narratives have a greater potential to have persuasive effects. However, evidence was not consistent, and the number of studies considered was low. But what has been observed in previous studies is that first-person messages (versus third-person narratives) are perceived as more personal and easier to understand, increase perspective taking and the identification with the character, and are more effective for inducing risk perception (Chen et al., 2017; De Graaf, Hoeken, Sanders, & Beentjes, 2012; Kaufman & Libby, 2012; Nan, Dahlstrom, Richards, & Rangarajan, 2015).

Nevertheless, studies that combined narrative voice and another second independent variable in the same experiment have not yielded as clear results. For instance, the study by Nan et al. (2017) showed that the first-person message was only superior over the third-person one when they used a text-based narrative. There were no differences when using the audio-based narrative. Likewise, Kaufman and Libby (2012) observed that reading a first-person narrative depicting a character that is part of the audience's in-group significantly increased identification.

Overview and Hypotheses

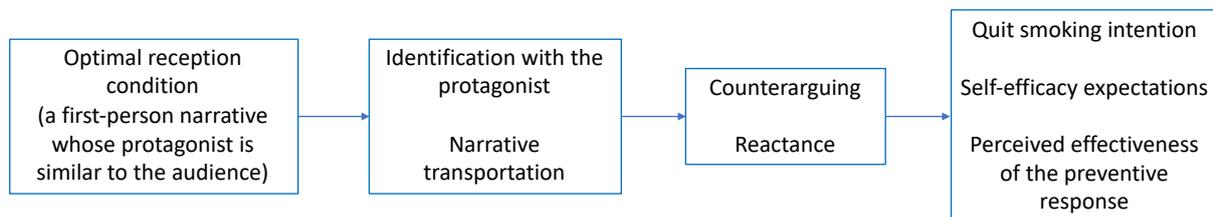
Our research aims to delve into the 'joint effect' of behavioral similarity and narrative voice. Thus, its original contribution or innovation to the study of narrative persuasion for smoking prevention is the concept of *optimal reception condition*, which implies the use of a first-person narrative led by a character with high behavioral similarity to the audience. Due to the scarcity of studies that

have used such variables in smoking prevention research, and considering the existence of contradictory results on the “main effects” of similarity and narrative voice, it is relevant to study how to combine both factors to induce greater levels of identification and narrative transportation, and to test the indirect effect (through such processes and through counterarguing and reactance) on the persuasive impact of smoking prevention narratives.

It can be expected that a smoking prevention message using a first-person voice and a character with high behavioral similarity to the audience (considering the degree of tobacco dependence) will increase identification with the protagonist and narrative transportation. It is therefore more likely that the message will not be perceived as a threat (it will not elicit reactance and counterarguing), and as such

it will have an indirect effect on the intention to quit smoking, on self-efficacy expectations, and on the perceived effectiveness of the preventive response. Therefore, it is hypothesized (H1) that the joint effect of first-person narrative and audience-character behavioral similarity will induce the highest levels of identification with the protagonist (H1a) and narrative transportation (H1b). Secondly, it is hypothesized (H2) that the optimal reception condition will have an indirect effect on the intention to quit smoking, on self-efficacy expectations, and on the perceived efficacy of the preventive response, which will be (serially) mediated by identification with the character (H2a) and narrative transportation (H2b) (primary mediators), and counterarguing and reactance (secondary mediators).

Figure 1. Hypothesized serial multiple mediator model



Method

With the aim of testing our hypotheses, an online experiment using Qualtrics was conducted among a representative sample of 680 smoker adults, aged 18-55 years, of both genders, residents in Spain. To estimate the sample size required, we conducted a previous analysis using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). All the participants were exposed to a narrative message whose protagonist was an adult smoker (a 35-year-old man) who told his experience in the process of quitting smoking, emphasizing the positive consequences of doing it. Narrative voice (first-person vs. third-person) and the degree of tobacco dependence of the narrative protagonist

(low vs. high) were manipulated in the narrative. All the materials related to the experiment (datasets, measures, narratives and pilot study results) are available in Open Science Framework (<https://osf.io/y3c8f/>).

Sample

A sample of 680 smoker adults, aged 18-55 years ($M = 35.68$, $SD = 10.85$), selected from Qualtrics (opt-in online panel provider) panels in Spain, and based on a quota of gender (50% of each gender) and age (20% aged 18-22 years, 30% aged 23-35 years and 50% aged 36-55 years), participated in the study. The fieldwork took place between 2 and 14 October 2018. To select participants, three screener

questions were included at the beginning of the online questionnaire: “in relation to tobacco, you would define yourself as” (never smoker, occasional smoker, regular smoker), “have you smoked 100 or more cigarettes in your lifetime?” (no, yes), “in the last week...” (I have not smoked, I have smoked less than 5 cigarettes a day, I have smoked 5 or more cigarettes a day). We only considered participants who were regular smokers, who have smoked 100 or more cigarettes in their lifetime, and who have smoked 5 or more cigarettes a day.

Design and Procedure

In the study, a 2 x 2 between-subjects factorial design was used. Two independent variables were manipulated: narrative voice (first-person vs. third-person message) and the degree of tobacco dependence of the narrative protagonist (low vs. high). The fieldwork was carried out by Qualtrics, which allowed us to use a completely randomized design regarding the distribution of participants into treatment groups.

Since Qualtrics enables to implement several quality controls, the questionnaire was designed so that it should be answered from beginning to end in a single session. Moreover, only those participants who had spent between 6 and 45 minutes answering the questionnaire ($M = 11.16$ minutes, $SD = 4.71$), had spent between 60 and 420 seconds reading the narrative ($M = 110.67$, $SD = 50.54$), and had answered correctly to the attention-check question placed at the end of the questionnaire, were considered as valid cases.

Narratives and Experimental Manipulations

A narrative whose protagonist was a 35-year-old man (*Miguel*) who had quit smoking a year ago (*former smoker*) was written using stories from former smokers on forums and websites and narratives from

previous studies (Dunlop et al., 2010; Kim et al., 2012; Kim et al., 2016; Williams et al., 2011) as a basis. In his story, the former smoker talked about issues such as the age at which he started smoking, why he decided to stop smoking, and how he managed to quit smoking. Likewise, he described the process of giving up tobacco and the improvements he has noticed since that time, but without including abstract information or statistical data. At the end of the narrative, the protagonist pointed out that he had not smoked for more than a year and described the benefits that he felt.

To manipulate narrative voice, we modified the features that establish the grammatical person in written narratives, such as the choice of personal pronouns. In the first-person narrative, we used first-person pronouns such as “I”, “me”, and “my” (e.g., “I quit smoking a year ago”), whereas in the third-person narrative, we used third-person pronouns such as “he” and “him” (e.g., “He quit smoking a year ago”). Moreover, in the first-person narrative, the protagonist introduced himself by name at the beginning: “my name is Miguel, I am 35 years old and I started smoking at 15”. In the third-person narrative, the narrator of the story introduced the protagonist by his name: “Miguel is 35 years old and he started smoking at 15”. This experimental procedure to manipulate narrative voice has been successfully employed in a great number of studies (Banerjee & Greene, 2012; Chen et al., 2017; Chen, McGlone, & Bell, 2015; Nan et al., 2015; Nan et al., 2017).

To manipulate behavioral similarity, we considered the degree of tobacco dependence of both the protagonist and the participants. The narrative whose protagonist was a former smoker with low tobacco dependence, included information about the level of tobacco consumption before quitting smoking (“I was not hooked on tobacco, I only smoked 9 or 10 cigarettes a day”), about the money he saved from quitting smoking (“I started saving, more

than 80 euros a month, by not buying tobacco), or vital change (“I no longer have to worry about having tobacco, I no longer need smoking to relax”). The narrative whose protagonist was a former smoker with high tobacco dependence, emphasized a higher level of tobacco consumption before quitting smoking (“I was completely hooked on tobacco, I smoked more than a pack a day”), higher savings from quitting smoking (“I started saving, more than 150 euros a month, by not buying tobacco”), or a more profound vital change (“I am no longer a tobacco slave who digs through household garbage looking for cigarette butts, I no longer wake up at night to smoke”).

In order to create an audience-character behavioral similarity index (low, high), in the pre-test measure we asked the participants about their degree of tobacco dependence using the Fagerström test (Heatherton, Kozlowski, Frecker, & Fagerström, 1991). The Fagerström test is a 6-item scale used to measure nicotine dependence. Combining the answers to the six items, the *degree* of nicotine dependence (values between 0 and 10) was determined. The characteristics of each participant were *matched* with the characteristics of the protagonist. Hence, similarity was determined taking behavioral criteria as a reference. *High similarity* was determined when the narrative’s protagonist had a high level of tobacco dependence and the participant scored 5 or more on the Fagerström test (median value in the study), or when the narrative’s protagonist had a low level of tobacco dependence and the participant scored less than 5 on the Fagerström test. Likewise, *low similarity* was determined when the narrative’s protagonist had a high level of tobacco dependence and the participant scored less than 5 on the Fagerström test, or when the narrative’s protagonist had a low level of tobacco dependence and the participant scored 5 or more on the Fagerström test.

A pilot study was conducted among 120 participants (57.5% females, aged 18-32 years, $M = 20.73$, $SD = 2.69$). Participants were randomly assigned to one of the four versions of the narrative. After reading the narrative, they answered a questionnaire with questions about clarity and understanding (e.g., “The message is clear and comprehensible”), perception of credibility, interest, and perceived realism, on 7-point Likert scale (from 1 = strongly disagree, to 7 = strongly agree). Results showed that narratives were perceived as clear and easy to understand ($M = 6.13$, $SD = 2.69$), credible ($M = 5.43$, $SD = 1.33$), interesting ($M = 5.30$, $SD = 1.28$) and realistic ($M = 5.92$, $SD = 0.97$). In all the variables considered the means were significantly higher than the theoretical mean (4), as tested with a one sample t-test ($p < .001$).

Measures

The questionnaire included pre-test measures and post-test measures. Pre-test measures included the screener questions and the Fagerström test (mentioned above), and also basic sociodemographic information (gender and age). After the reading of the narrative whose protagonist was a former smoker, post-test measures were immediately presented. They included scales (following this order) to evaluate perceived similarity with the protagonist, identification with the protagonist, narrative transportation, counterarguing, reactance, quit smoking intention, self-efficacy expectations, and perceived effectiveness of the preventive response.

Dependent variables

Quit smoking intention. A scale composed of 3 items (e.g., “I am definitely going to quit smoking in the future”, from 1 = strongly disagree, to 7 = strongly agree) was developed following the work of Dunlop et al. (2010), Kim et al. (2012), Kim et al. (2016), Thrasher, Arillo-Santillán,

Villalobos, Pérez-Hernández, Hammond, Carter, Sebríe, Sansores, and Regalado-Piñeda (2012), Wehbe, Basil, and Basil (2017), and Williams et al. (2011). An index of quit smoking intention was obtained by averaging the three items ($\alpha = .82$).

Self-efficacy expectations related to quitting smoking. Self-efficacy is defined as the confidence a person has in their ability to have and maintain a certain behavior in a given situation (in this case, refrain from smoking when such habit has been left) (Spek, Lemmens, Chatrou, Kempen, Pouwer, & Pop, 2013). To measure self-efficacy expectations, we used a scale composed of 6 items (e.g., “I think I am capable of quitting smoking whenever I want”, from 1 = strongly disagree, to 7 = strongly agree) following the work of Chen et al. (2015), McQueen, Waters, Kaphingst, Caburnay, Sanders Thompson, Boyum, and Kreuter (2016), Spek et al., (2013) and Williams et al. (2011). An index of self-efficacy expectations was calculated by averaging the six items ($\alpha = .88$).

Perceived effectiveness of the preventive response (quit smoking). It was assessed with a scale composed of 5 items (e.g., “although you have smoked for many years, it is possible to recover your health if you quit smoking in time”, from 1 = strongly disagree, to 7 = strongly agree) based on the study by Chen et al. (2015). An index of perceived effectiveness of the preventive response was created by averaging the five items ($\alpha = .78$).

Mediator variables

Identification with the protagonist. It was assessed with a scale composed of 11 items whose reliability and structural validity has been tested in a previous study (Igartua & Barrios, 2012). The instrument was designed to measure retrospectively the identification with the protagonist (e. g., “I felt as if I was Miguel”, from 1 = not at all, to 5 = very much). An index of identification with the protagonist

was obtained by averaging the eleven items ($\alpha = .93$).

Narrative transportation. It was measured with the *Transportation Scale–Short Form* developed by Appel, Gnambs, Richter, and Green (2015), and composed of 5 items (e.g., “I felt very involved or engaged during the reading of the story”, from 1 = strongly disagree, to 7 = strongly agree). An index of narrative transportation was calculated by averaging the five items ($\alpha = .89$).

Counterarguing. A scale composed of 3 items (e.g., “while I was reading the message, I thought that the information provided by Miguel was inaccurate, misleading or exaggerated”, from 1 = strongly disagree, to 7 = strongly agree) was developed following the scale by Moyer-Gusé and Nabi (2010), and Igartua and Vega (2016). An index of counterarguing was obtained by averaging the three items ($\alpha = .72$).

Reactance. It was assessed using the perceived threat to freedom scale developed by Shen (2015). This scale consists of 4 items (e.g., “the message threatened my freedom to choose”, from 1 = strongly disagree, to 7 = strongly agree). An index of reactance was calculated by averaging the four items ($\alpha = .85$).

Experimental manipulation check

Perceived similarity with the protagonist of the story. With the aim of testing the experimental manipulation, immediately after reading the narrative, participants answered the following questions: “to what extent do you think you have things in common with Miguel?”, “to what extent do you think you are similar to Miguel considering his degree of tobacco dependence before he quit smoking?” (from 1 = not at all, to 5 = very much). Both items were combined to form an index of perceived similarity with the protagonist ($r = .53$, $p = .001$; $M = 3.41$, $SD = 0.84$).

Results

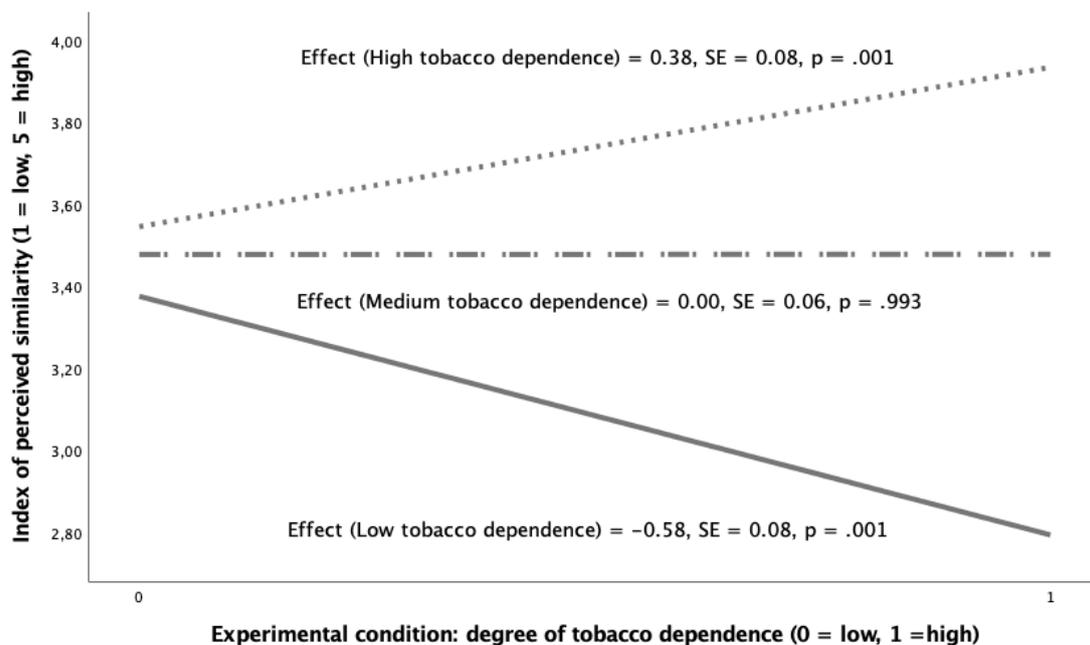
Preliminary Analysis

The random allocation to the four experimental conditions was successful. There were no statistically significant differences between the conditions in sociodemographic terms (gender ($\chi^2(3, N = 680) = 1.01, p = .798$; age ($F(3, 676) = 0.07, p = .973$) or in the degree of tobacco dependence ($F(3, 676) = 0.52, p = .663$).

The manipulation of behavioral similarity was also effective. Using moderation analysis (model 1) with PROCESS for SPSS (Hayes, 2018), we found that there was a statistically significant interaction effect between the degree of tobacco dependence of the narrative protagonist and the participants' degree of tobacco dependence (Fagerström test) on the index of perceived similarity (B

$= 0.19, SE = 0.02, p = .001$). Analysis of conditional effects revealed that participants with low tobacco dependence (scored 2 or less on the Fagerström test) reported higher perceived similarity when reading the narrative whose protagonist had low tobacco dependence before quitting smoking than when reading the one whose protagonist had high tobacco dependence ($\theta_{X \rightarrow Y | (W = 2.0)} = -0.58, SE = 0.09, p = .001$). Likewise, participants with high tobacco dependence (scored 7 or more on the Fagerström test) reported higher perceived similarity when reading the narrative whose protagonist had high tobacco dependence than reading the one whose protagonist had low dependence ($\theta_{X \rightarrow Y | (W = 7.0)} = 0.38, SE = 0.08, p = .001$). On the contrary, the effect of protagonist's degree of tobacco dependence on perceived similarity was not statistically significant among participants with medium tobacco dependence ($\theta_{X \rightarrow Y | (W = 5.0)} = 0.01, SE = 0.06, p = .993$).

Figure 2. Manipulation check: conditional effect of the degree of tobacco dependence of the narrative protagonist on perceived similarity in participants with low, medium and high-tobacco dependence (Fagerström test)



Note. - Conditional effects analysis with PROCESS macro for SPSS (Model 1). Covariates: narrative voice, gender and age.

Finally, correlations between mediators and dependent variables were analyzed. This analysis revealed that mediation processes showed convergent correlations with the proposed hypotheses (e.g., association between identification and narrative transportation with reactance and

counterarguing). Moreover, we also identified statistically significant relationships between mediation processes and the dependent variables. These results justify the proposed mediation model that will be tested later in this paper.

Table 1. *Descriptive analysis and correlations between mediating and dependent variables*

	1	2	3	4	5	6	7
1 Identification	-						
2 Narrative transportation	.85 ***	-					
3 Counterarguing	-.31 ***	-.30 ***	-				
4 Reactance	-.26 ***	-.29 ***	.44 ***	-			
5 Quit smoking intention	.51 ***	.49 ***	-.18 ***	-.23 ***	-		
6 Self-efficacy expectations	.10 **	.14 ***	-.04	-.14 ***	.33 ***	-	
7 Perceived effectiveness of the preventive response	.41 ***	.43 ***	-.27 ***	-.28 ***	.39 ***	.30 ***	-
Mean	3.64	5.28	2.76	2.62	4.71	4.53	5.81
Standard deviation	0.79	1.18	1.24	1.39	1.36	1.31	0.91

Note. - $N = 680$. In all variables, a higher score reflects a greater intensity of the process considered, from 1 “low” to 7 “high” (except in the identification scale with a theoretical range from 1 “low” to 5 “high”).

** $p < .01$, *** $p < .001$

Joint Effect of Audience-Character Behavioral Similarity and Narrative Voice on Identification and Narrative Transportation (H1)

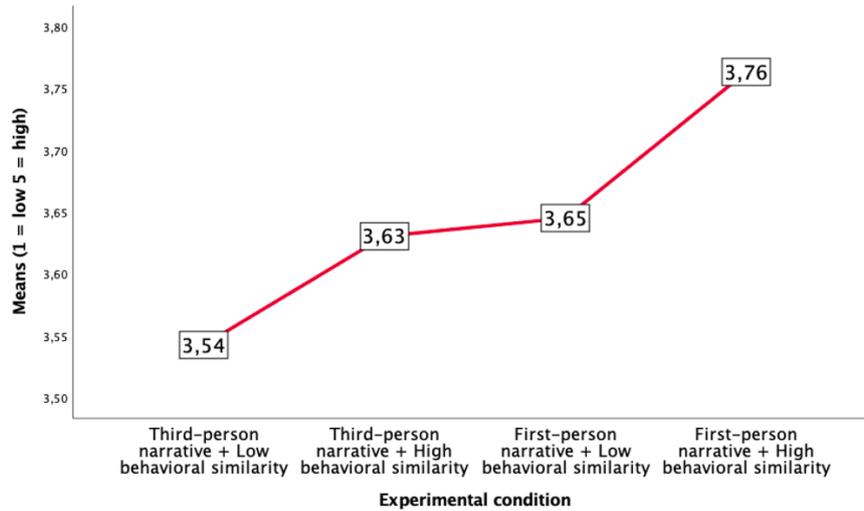
It had been hypothesized that participants would experience the highest levels of identification with the protagonist (H1a) and narrative transportation (H1b) in the optimal reception condition compared to the reference condition. To test this hypothesis, two analysis of variance (ANOVA) with the experimental condition as an independent variable and identification and narrative transportation as dependent variables were performed, carrying out two planned contrast analyses (post hoc tests) (see Walter et al., 2018, for a similar analytical approach). The first planned contrast (contrast coefficients: -1, 0, 0, 1) compared condition 4 or optimal reception condition (i.e., reading a first-person narrative with a high-similarity

character, coefficient 1) with reference condition 1 (that is, reading a third-person narrative with a low-similarity character, coefficient -1). The second planned contrast (coefficients: -1, -1, -1, 3) compared the optimal reception condition with the average of the three experimental conditions.

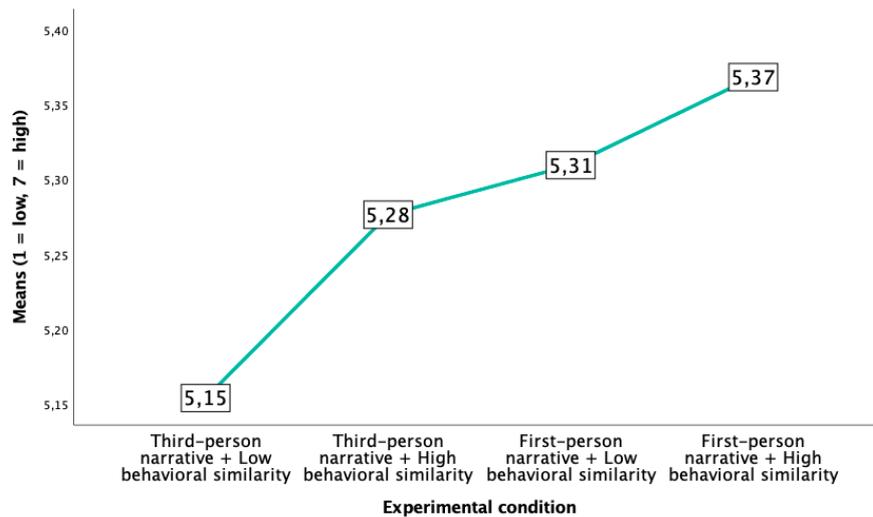
Regarding identification, marginally non-significant statistical differences were observed as a function of the experimental condition ($F(3, 676) = 2.23, p = .083, \eta_p^2 = 0.010$). However, the two planned contrasts were statistically significant (contrast 1: $t(676) = 2.55, p = .011, r = .09$; contrast 2: $t(676) = 2.28, p = .023, r = .08$). These results showed that the optimal reception condition induced the highest levels of identification with the protagonist, which supports H1a (see Figure 3a).

Figure 3. Effect of the experimental condition on identification with the protagonist (H1a) and narrative transportation (H1b)

(a) Effect of experimental condition on identification



(b) Effect of experimental condition on narrative transportation



With respect to narrative transportation, no statistically significant differences were observed depending on the experimental condition ($F(3, 676) = 0.96, p = .410, \eta_p^2 = 0.004$). In addition, the two planned contrasts were also not statistically significant (contrast 1: $t(676) = 1.66, p = .097, r = .06$; contrast 2: $t(676) = 1.18, p = .236, r = .04$), so H1b was not confirmed. However, the descriptive results showed that the optimal reception condition also

induced the highest levels of narrative transportation (see Figure 3b).

Mediation Analysis (H2)

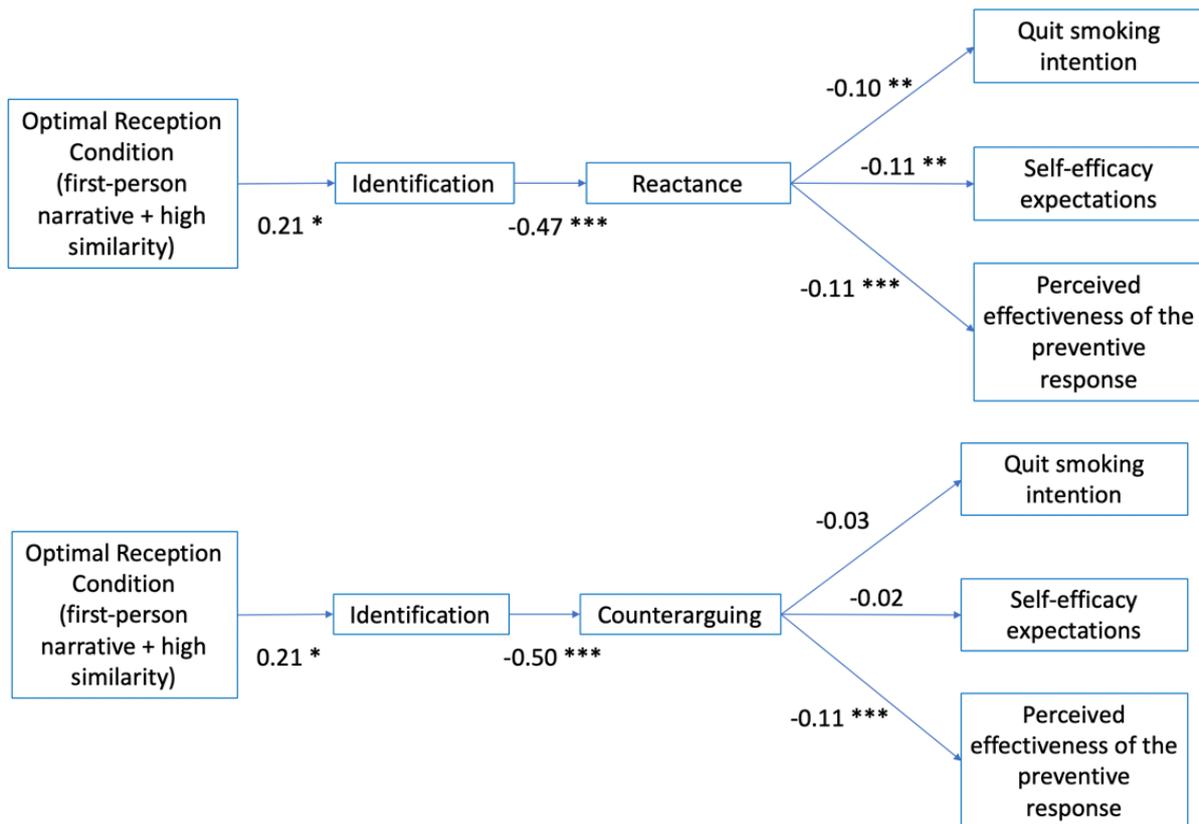
The second hypothesis predicted an indirect effect of the optimal reception condition on the intention to quit smoking, on self-efficacy expectations, and on the perceived efficacy of the preventive response, which would be mediated by identification (H2a) and narrative transportation (H2b) (primary mediators)

and counterarguing and reactance (secondary mediators). To examine whether the optimal reception condition induced a significant indirect effect on the dependent variables, the PROCESS macro for SPSS was used (Model 6, serial multiple mediator model, 10,000 bootstrapping samples to generate 95% confidence intervals by the percentile method; Hayes, 2018). The independent variable (experimental condition) was coded as a multicategorical variable, resulting in three dummy variables (X1, X2, X3) and establishing the control condition (third-person narrative with a low-similarity protagonist) as the category of reference (for a similar analytical approach, see: Bolkan, Goodboy & Myers,

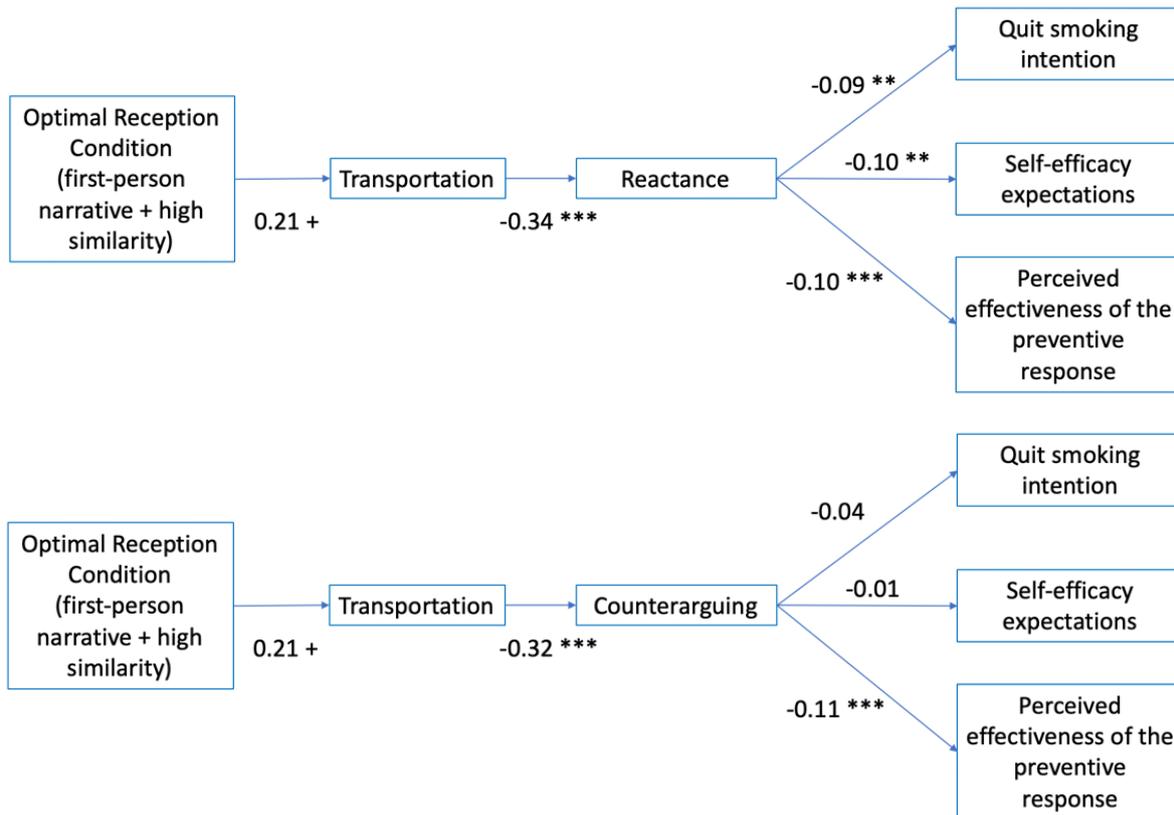
2017; Walter et al., 2018). This procedure required the estimation of the indirect effect of the optimal reception condition (X3), while the other two *dummy* variables (X1, X2) acted as covariates (Hayes & Preacher, 2014; gender and age were also included as covariates). Thus, regression coefficients that estimate the indirect effect, calculate the difference between being exposed to a first-person narrative with a protagonist with high behavioral similarity (1) versus being exposed to a third-person narrative with a protagonist with low behavioral similarity (0). Results from the 12 mediation analyses are presented in Figure 4 and Table 2.

Figure 4. Mediation analysis (H2)

H2a (primary mediator: identification)



H2b (primary mediator: narrative transportation)



Nota. - Optimal Reception Condition (X3): first person narration with a protagonist with high behavioral similarity with the participant (depending on the degree of tobacco dependence). The figure shows the non-standardized regression coefficients (B). $N = 680$. + $p < .10$, ** $p < .01$, *** $p < .001$. Covariates: X1, X2, gender and age.

It was observed that the optimal reception condition increased the identification with the protagonist of the narrative, which in turn reduced reactance and counterarguing. In addition, a lower level of reactance was associated with a greater intention to quit smoking, with higher self-efficacy expectations and with a greater perceived effectiveness of the preventive response. However, even though identification reduced counterarguing, this process was only associated with one of the dependent variables considered: counterarguing during reading the narrative was negative associated with the perceived efficacy of the preventive response. Therefore, confirming the H2a, we observed three statistically significant indirect effects of the optimal reception condition on the three dependent variables

that were explained by the increase in the identification and the reduction of the reactance. In addition, we also observed a statistically significant indirect effect of the optimal reception condition on the perceived effectiveness of the preventive response, which was due to an increase of identification and a reduction of counterarguing (see Table 2).

The results were less consistent regarding the role of narrative transportation, mainly because the optimal reception condition had a marginally non-significant effect ($p = .097$) on this process. However, it was observed that narrative transportation reduced both counterarguing and reactance. In turn, a lower level of reactance increased the intention to quit smoking, self-efficacy expectations, and the perceived effectiveness of the preventive

response. However, a lower counterarguing was only associated with a greater perceived effectiveness of the preventive

response. Thus, the results do not support H2b.

Table 2. *Indirect effects of the optimal reception condition (ORC) on quit smoking intention, self-efficacy expectations and perceived effectiveness of the preventive response (H2). Mediation analysis with PROCESS macro for SPSS (Model 6).*

Indirect effects	Effect	Boot SE	Boot 95% IC
ORC → Identification → Reactance → Quit smoking intention	.0109	.0065	[-.0014, .0261]
ORC → Identification → Reactance → Self-efficacy expectations	.0115	.0068	[-.0013, .0280]
ORC → Identification → Reactance → Perceived effectiveness of the preventive response	.0121	.0057	[-.0026, .0249]
ORC → Identification → Counterarguing → Quit smoking intention	.0037	.0048	[-.0042, .0153]
ORC → Identification → Counterarguing → Self-efficacy expectations	.0026	.0053	[-.0072, .0144]
ORC → Identification → Counterarguing → Perceived effectiveness of the preventive response	.0129	.0062	[-.0028, .0269]
ORC → Transportation → Reactance → Quit smoking intention	.0073	.0058	[-.0011, .0211]
ORC → Transportation → Reactance → Self-efficacy expectations	.0074	.0059	[-.0013, .0216]
ORC → Transportation → Reactance → Perceived effectiveness of the preventive response	.0079	.0054	[-.0013, .0202]
ORC → Transportation → Counterarguing → Quit smoking intention	.0034	.0038	[-.0019, .0127]
ORC → Transportation → Counterarguing → Self-efficacy expectations	.0009	.0035	[-.0056, .0092]
ORC → Transportation → Counterarguing → Perceived effectiveness of the preventive response	.0080	.0055	[-.0013, .0205]

Note. - The independent variable (X3 with PROCESS) was coded with the values 0 = being exposed to a third-person narrative with a low behavioral similarity protagonist (reference category or control group) and 1 = being exposed to a narration written in the first person with a high behavioral similarity protagonist (ORC). The table shows the indirect effects. An indirect effect is considered to be statistically significant if the established confidence interval (95% CI) does not include the value 0. If the value 0 is included in the confidence interval, that means that the indirect effects is equal to 0, that is, there is no an association between the variables involved (Hayes, 2018). Statistically significant indirect effects are marked in bold. Covariates: X1, X2, gender and age.

Discussion and conclusions

The present study provides evidence on how to improve smoking prevention interventions targeting adults. It has been shown that variables related to the construction of prevention messages (in particular, the joint effect of narrative voice and audience-character behavioral similarity) have a significant effect on quit smoking intention, on self-efficacy expectations and on the perceived effectiveness of the preventive response,

since they initiate empathic involvement processes, which in turn reduce the resistance towards the persuasive message.

Furthermore, the present study presents two innovations compared to previous studies: the concepts of behavioral similarity and optimal reception condition. In the past, similarity had been manipulated only in demographic traits, such as gender, nationality or ethnic origin, and results were inconsistent (Cohen et al., 2018; Kaufman & Libby, 2012; Kim, 2019; Tukachinsky, 2014). In the present study we have

demonstrated that is possible to effectively manipulate behavioral similarity by highlighting that the narrative's protagonist shares a "common story" with the audience (in this case, about tobacco dependence), since it has been proven that this manipulation increases perceived similarity. The second original contribution of this study (within the area of narrative persuasion for smoking prevention) is the concept of *optimal reception condition* (first-person narrative with a protagonist with high behavioral similarity to the audience), since previous studies had analyzed the effect of such variables (similarity and narrative voice) separately (e.g., De Graaf et al., 2016).

Therefore, and in line with hypothesis 1, it was found that the optimal reception condition induced greater levels of identification with the protagonist (H1a), but it did not significantly increase narrative transportation (H1b). Regarding the mediation analyses (H2), the optimal reception condition had three significant indirect effects on the dependent variables, which were due to the increase in identification and the reduction in reactance. Moreover, the optimal reception condition had also a statistically significant indirect effect on the perceived effectiveness of the preventive response, which is explained by the increase in identification and the reduction of counterarguing.

These results are consistent with previous studies showing that first-person narratives, by being perceived as more personal (since they promote closeness between the reader and the narrative's protagonist) and easier to understand, increased identification with the protagonist (Chen et al., 2016, 2017; Christy, 2018; De Graaf et al., 2012; Kaufman & Libby, 2012; Nan et al., 2015). However, the optimal reception condition had a marginally non-significant effect on narrative transportation. This result is not far from previous studies, such as the one by Banerjee and Greene (2012), which found

no impact of first or third-person narratives on narrative transportation. Likewise, the meta-analysis by Tukachinsky (2014) concluded that narrative voice influences identification, but not narrative transportation. On the other hand, our study showed that both narrative transportation and identification reduced reactance, and these findings are consistent with the E-ELM (Slater & Rouner, 2002) and EORM (Moyer-Gusé, 2008) theoretical models, which are widely applied in narrative health communication. In fact, our study has noted that both narrative transportation and identification lead to lower levels of counterarguing. Therefore, according to previous research, and as it was proposed in our second hypothesis (H2a), identification with the protagonist was a mediator variable, but narrative transportation did not act as a significant mediator (Cohen, Tal-Or, & Mazar-Treerman, 2015; De Graaf et al., 2012; Green & Brock, 2000; Hoeken & Fikkers, 2014; Igartua, 2017; Igartua & Barrios, 2012; Walter et al., 2018).

One of the limitations of this study is not having properly controlled (in the narrative design) the effect of demographic similarity, particularly the effect of protagonist's gender and age. Although the meta-analysis review by Tukachinsky (2014) concluded that objective similarity (based on sociodemographic traits, such as gender, age or ethnic origin) has no significant effect on identification (but it has on narrative transportation and perceived similarity), this systematic review was based on 48 experimental studies on narrative persuasion in general. Therefore, future studies should verify whether this result could be generalized to smoking prevention.

The results obtained allow us to think about different applications in the field of tobacco prevention and treatment. Firstly, the primary means of prevention of smoking risks are the health warnings on cigarette packets, which can be avoided and caused reactance (Rodríguez-Contreras, & Igartua, 2018). Therefore, we suggest that

narrative smoking prevention campaigns using the first-person voice and designed to stimulate audience-character behavioral similarity should be implemented, since the present study has shown that these variables had a significant (indirect) effect on the quit smoking intention, self-efficacy expectations, and on the perceived effectiveness of the preventive response. This is possible because these variables initiate mechanisms of *affective connection* with the message (in this case, identification with the characters) that reduce reactance.

We consider that a narrative intervention such as the one suggested could be aimed at tobacco treatment, but it could also become a primary prevention tool, since any attempt to reduce tobacco consumption indirectly aims to prevent health problems or diseases related to smoking. In this regard, as with the *Tips from Former Smokers* campaign (developed in the United States), a former smoker's experience (i.e., someone who has overcome their tobacco addiction) would be used both for preventing smoking (that is, preventing people from taking up smoking) and for helping current smokers to quit, and thus to prevent smoking damage.

Secondly, one strategy that is becoming increasingly present in the field of health and, specifically, in the smoking prevention field, is the development of mobile applications to quit smoking (Lacoviello, Steinerman, Klein, Silver, Berger, Luo, & Schork, 2017; Ubhi, Michie, Kotz, Wong, & West, 2015). In this regard, it would be interesting to develop mobile applications for smoking prevention in which the user could customize the avatar in relation to their behavioral similarity. Thus, we could analyze whether the possibility of being able to choose a character with similar characteristics makes the application more effective. This type of applications could be particularly relevant for smoking prevention among young people and adolescents, since they intensively use smartphones.

In conclusion, the present study yields relevant insights for health-related narrative persuasion research by showing how certain *narrative devices* (such as the combined use of a first-person message and the inclusion of elements to increase behavioral similarity with the protagonist) can be useful for improving smoking prevention and treatment.

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Appendix – Narratives (Spanish versions)

First-person narrative and a protagonist with low tobacco dependence (N1)

Mi nombre es Miguel, tengo 35 años y empecé a fumar a los 15. A los pocos meses ya fumaba a diario, aunque nunca fui de esas personas que se encienden un cigarro recién levantadas, no estaba tan enganchado, sólo fumaba 9 o 10 cigarrillos al día. Durante casi veinte años fumé prácticamente a diario, y me daba igual que me dijeran que el tabaco mata. Yo era muy joven para pensar en eso. Hace un año sufrí un amago de infarto. Esto me hizo entender que ya no era tan joven y que mi cuerpo ya no respondía como antes. Me asusté. El médico me dijo que lo primero que tenía que hacer era dejar de fumar para que mi cuerpo se recuperara y que con el tiempo sería como si nunca hubiera fumado.

Las primeras semanas fueron muy difíciles. Me dolía muchísimo la cabeza, tenía ansiedad y me costaba mucho concentrarme en el trabajo (no podía parar de pensar en encenderme un cigarro, en darle una última calada). Además, como estaba todo el día ansioso e inquieto, me costaba dormir. Creía que no iba a ser capaz, sólo el miedo a sufrir un infarto me hacía tirar para adelante. A los tres meses empecé a ver algunos cambios en mi cuerpo: le sacaba sabor a la comida, mi olfato también mejoró e incluso notaba que respiraba mejor. Pensé que hacer deporte me vendría bien y así fue... me sentía más relajado, ya no tenía problemas para dormir, mi tensión arterial bajó y desapareció por completo la tos que siempre tenía al levantarme. Además, empecé a ahorrar, más de 80 euros al mes, al dejar de comprar tabaco.

Ya hace un año que dejé de fumar. Ahora me siento mucho mejor, más libre: ya no tengo que estar pendiente de tener tabaco, ya no tengo la necesidad de fumarme un cigarro para “relajarme”, o de esperar hasta el descanso del trabajo para fumarme un cigarro.

Sé que esto sólo es el principio y que para que los pulmones estén completamente limpios tienen que pasar diez años, pero no me voy a rendir, no quiero volver a fumar un cigarro. Gracias a dejar de fumar mi salud ha mejorado y ha disminuido el riesgo de volver a sufrir un infarto. Todo esto hace que no quiera volver a fumar, ya no me atrae, incluso cuando veo a otras personas fumar no me llama. Esto me da aún más fuerzas para no volver a fumar. Mi estilo de vida ha cambiado y el tabaco se ha convertido en algo incompatible con mi día a día.

First-person narrative and a protagonist with high tobacco dependence (N2)

Mi nombre es Miguel, tengo 35 años y empecé a fumar a los 15. A los pocos meses ya no podía empezar el día sin fumarme un par de cigarrillos, incluso antes de desayunar. Estaba muy enganchado y fumaba más de una cajetilla de tabaco al día. Durante casi veinte años fumé a diario, incluso cuando estaba enfermo, y me daba igual que me dijeran que el tabaco mata. Yo era muy joven para pensar en eso. Hace un año sufrí un amago de infarto. Esto me hizo entender que ya no era tan joven y que mi cuerpo ya no respondía como antes. Me asusté. El médico me dijo que lo primero que tenía que hacer era dejar de fumar para que mi cuerpo se recuperara y que con el tiempo sería como si nunca hubiera fumado.

Las primeras semanas fueron muy difíciles. Me dolía muchísimo la cabeza, tenía ansiedad y me costaba mucho concentrarme en el trabajo (no podía parar de pensar en encenderme un cigarro, en darle una última calada). Además, como estaba todo el día ansioso e inquieto, me costaba mucho dormir. Creía que no iba a ser capaz, sólo el miedo a sufrir un infarto me hacía tirar para adelante. A los tres meses empecé a ver algunos cambios en mi cuerpo: le sacaba sabor a la comida, mi olfato también mejoró e incluso notaba que respiraba mejor. Pensé que hacer deporte me vendría bien y así fue... me sentía más relajado, ya no tenía problemas para dormir, mi tensión arterial bajó y desapareció por completo la tos que siempre tenía al levantarme. Además, empecé a ahorrar, más de 150 euros al mes, al dejar de comprar tabaco.

Ya hace un año que dejé de fumar. Ahora me siento mucho mejor, más libre: ya no soy un esclavo del tabaco que hurga en la basura de casa en busca de colillas, ya no me despierto por las noches para fumar y tampoco me levanto pensando en ese primer cigarro.

Sé que esto sólo es el principio y que para que los pulmones estén completamente limpios tienen que pasar diez años, pero no me voy a rendir, no quiero volver a caer en el vicio. Gracias a dejar de fumar mi salud ha mejorado y ha disminuido el riesgo de volver a sufrir un infarto. Todo esto hace que no quiera volver a fumar, ya no me atrae, incluso cuando veo a otras personas fumar no me llama. Esto me da aún más fuerzas para no volver a fumar. Mi estilo de vida ha cambiado y el tabaco se ha convertido en algo incompatible con mi día a día.

Third-person narrative and a protagonist with low tobacco dependence (N3)

Miguel tiene 35 años y empezó a fumar a los 15. A los pocos meses ya fumaba a diario, aunque nunca fue de esas personas que se encienden un cigarro recién levantadas, no estaba tan enganchado, sólo fumaba 9 o 10 cigarrillos al día. Durante casi veinte años fumó prácticamente a diario, y le daba igual que le dijeran que el tabaco mata. Miguel era muy joven para pensar en eso. Hace un año sufrió un amago de infarto. Esto le hizo entender que ya no era tan joven y que su cuerpo ya no respondía como antes. Se asustó. El médico le dijo que lo primero que tenía que hacer era dejar de fumar para que su cuerpo se recuperara y que con el tiempo sería como si nunca hubiera fumado.

Las primeras semanas fueron muy difíciles para Miguel. Le dolía muchísimo la cabeza, tenía ansiedad y le costaba mucho concentrarse en el trabajo (no podía parar de pensar en encenderse un cigarro, en darle una última calada). Además, como estaba todo el día ansioso e inquieto, le costaba dormir. Creía que no iba a ser capaz, sólo el miedo a sufrir un infarto le hacía tirar para adelante. A los tres meses empezó a ver algunos cambios en su cuerpo: le sacaba sabor a la comida, su olfato también mejoró e incluso notaba que respiraba mejor. Pensó que hacer deporte le vendría bien y así fue... se sentía más relajado, ya no tenía problemas para dormir, su tensión arterial bajó y desapareció por completo la tos que siempre tenía al levantarse. Además, empezó a ahorrar, más de 80 euros al mes, al dejar de comprar tabaco.

Ya hace un año que Miguel dejó de fumar. Ahora se siente mucho mejor, más libre: ya no tiene que estar pendiente de tener tabaco, ya no tiene la necesidad de fumarse un cigarro para “relajarse”, o de esperar hasta el descanso del trabajo para fumarse un cigarro.

Miguel sabe que esto sólo es el principio y que para que sus pulmones estén completamente limpios tienen que pasar diez años, pero no se va a rendir, no quiere volver a fumar un cigarro. Gracias a dejar de fumar su salud ha mejorado y ha disminuido el riesgo de volver a sufrir un infarto. Todo esto hace que no quiera volver a fumar, ya no le atrae, incluso cuando ve a otras personas fumar no le llama. Esto le da aún más fuerzas para no volver a fumar. Su estilo de vida ha cambiado y el tabaco se ha convertido en algo incompatible con su día a día.

Third-person narrative and a protagonist with high tobacco dependence (N4)

Miguel tiene 35 años y empezó a fumar a los 15. A los pocos meses ya no podía empezar el día sin fumarse un par de cigarrillos, incluso antes de desayunar. Estaba muy enganchado y fumaba más de una cajetilla de tabaco al día. Durante casi veinte años fumó a diario, incluso cuando estaba enfermo, y le daba igual que le dijeran que el tabaco mata. Miguel era muy joven para pensar en eso. Hace un año sufrió un amago de infarto. Esto le hizo entender que ya no era tan joven y que su cuerpo ya no respondía como antes. Se asustó. El médico le dijo que lo primero que tenía que hacer era dejar de fumar para que su cuerpo se recuperara y que con el tiempo sería como si nunca hubiera fumado.

Las primeras semanas fueron muy difíciles para Miguel. Le dolía muchísimo la cabeza, tenía ansiedad y le costaba mucho concentrarse en el trabajo (no podía parar de pensar en encenderse un cigarro, en darle una última calada). Además, como estaba todo el día ansioso e inquieto, le costaba mucho dormir. Creía que no iba a ser capaz, sólo el miedo a sufrir un infarto le hacía tirar para adelante. A los tres meses empezó a ver algunos cambios en su cuerpo: le sacaba sabor a la comida, su olfato también mejoró e incluso notaba que respiraba mejor. Pensó que hacer deporte le vendría bien y así fue... se sentía más relajado, ya no tenía problemas para dormir, su tensión arterial bajó y desapareció por completo la tos que siempre tenía al levantarse. Además, empezó a ahorrar, más de 150 euros al mes, al dejar de comprar tabaco.

Ya hace un año que Miguel dejó de fumar. Ahora se siente mucho mejor, más libre: ya no es un esclavo del tabaco que hurga en la basura de casa en busca de colillas, ya no se despierta por las noches para fumar y tampoco se levanta pensando en ese primer cigarro.

Miguel sabe que esto sólo es el principio y que para que sus pulmones estén completamente limpios tienen que pasar diez años, pero no se va a rendir, no quiere volver a caer en el vicio. Gracias a dejar de fumar su salud ha mejorado y ha disminuido el riesgo de volver a sufrir un infarto. Todo esto hace que no quiera volver a fumar, ya no le atrae, incluso cuando ve a otras personas fumar no le llama. Esto le da aún más fuerzas para no volver a fumar. Su estilo de vida ha cambiado y el tabaco se ha convertido en algo incompatible con su día a día.