



PREVENTING HATE AGAINST REFUGEES AND MIGRANTS

Report about the effect of Entertainment-Education audiovisual fictional narratives

December 2021



This project is funded by the European Union's Rights, Equality and Citizenship Programme (2014-2020). REC-RRAC-RACI-AG-2019. Grant Agreement number 875217

<http://pharmproject.usal.es>

This report constitutes Deliverable 27, for Work Package 5 of the PHARM project.

December 2021

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Please refer to this publication as follows:

Type the author(s) (year). *Title & subtitle* (Deliverable n°). Pharm project 875217 – H2020.

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VERSION CONTROL SHEET

Deliverable number + title	D27. Report about the effects of the stories
Prepared by	Pharm Team
Work package number	5
Work package leader	Juan José Igartua Perosanz
Dissemination level (PU, CO)	PU
Delivery date	15/12/2021
Submission date to EC	
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REVISION HISTORY

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1. Introduction

Migratory movements generally have to face resistance to social inclusion from host societies, manifested through reactions such as discrimination, racism, and xenophobia. This phenomenon of rejection can currently be observed in Southern European countries that have traditionally been subjected to strong migratory pressure, such as Spain, Greece, and Italy (European Commission, 2018; European Commission, 2019). This makes it necessary to develop effective communication strategies to improve the attitude towards immigration of the populations of the host countries, as well as to counteract the hate speech present in social networks.

The objective of WP5, therefore, is to complement the findings of the rest of the teams belonging to the PHARM program by conducting an experimental research about which strategies would be most useful in order to reach these objectives, analyzing the elements of the message involved in attitudinal change processes and testing the impact of certain format of persuasive messages.

Entertainment-education strategies

The strategies commonly used to reduce prejudice toward immigrant populations (information campaigns) are frequently ineffective because they induce reactance and counterarguing, and suffer from selective exposure (Wojcieszak & Kim, 2016). On the other hand, other, more subtle forms of persuasion through narrative messages may be more effective for favoring intergroup media contact (Murrar & Brauer, 2018, 2019; Park, 2012). The meta-analysis carried out by Banas et al. (2020) concluded that positive intergroup media contact (showing collaborative or cooperative behaviors, or a nonstereotyped image of stigmatized groups) reduces prejudice.

Entertainment-education (EE) formats are one of the important narrative persuasion strategies in this field (Müller, 2009; Murrar & Brauer, 2018; Siem et al., 2021). This type of media intervention usually includes characters playing positive and negative roles as well as transitional characters. A transitional character “is one whose behavior evolves over the course of a story in keeping with the underlying message the program aims to get across” (Moyer-Gusé et al., 2019, p. 186). However, little research has been carried out on the features of transitional characters that could enhance identification in the audience, one of the most relevant mediating mechanisms to explain the attitudinal impact (Moyer-Gusé, 2008; Slater & Rouner, 2002).

Theoretical models of narrative persuasion have established that the similarity with the protagonist can be a relevant factor to increase identification. However, the meta-analysis review by Tukachinsky (2014) concluded that (demographic) similarity did not significantly influence identification, although it did influence perceived similarity. It has also been observed that perceived similarity can act as a psychological trigger for identification (Guerrero-Martín & Igartua, 2021; Ooms et al., 2019; Tsay & Krakowiak, 2011).

Objetives

In this context, the present study proposes a mediation model in which demographic similarity has an effect on perceived similarity, which, in turn, induces greater identification with the protagonist (H1).

Previous studies on EE and prejudice reduction have shown that identification is a relevant mechanism to achieve an attitudinal impact (Müller, 2009; Murrar & Brauer, 2018). However, why identification leads to this impact on attitudes has not been investigated to date. The current work addresses this question by analyzing the role of cognitive elaboration. Cognitive elaboration is defined as a process of reflection around the content of a message and provides a measure of the intensity with which a topic is reflected on during the reception process (Petty & Cacioppo, 1996). Cohen (2001) points out that identification constitutes a process of temporal involvement, making it possible that cognitive elaboration will increase during the reception of a message. The role of cognitive elaboration has already been studied in other works on EE in the context of health promotion (Igartua & Vega, 2016). However, their role in research on reducing prejudice through EE messages has not been analyzed. The current study analyzes the effect of the similarity with a transitional character who is the protagonist of an EE narrative message focused on the reduction of xenophobia. It is hypothesized (H2) that demographic similarity will increase the perceived similarity, which will in turn be associated with greater identification. This process, in turn, will be associated with greater cognitive elaboration, which will lead to a greater attitudinal impact (Fig. 1).

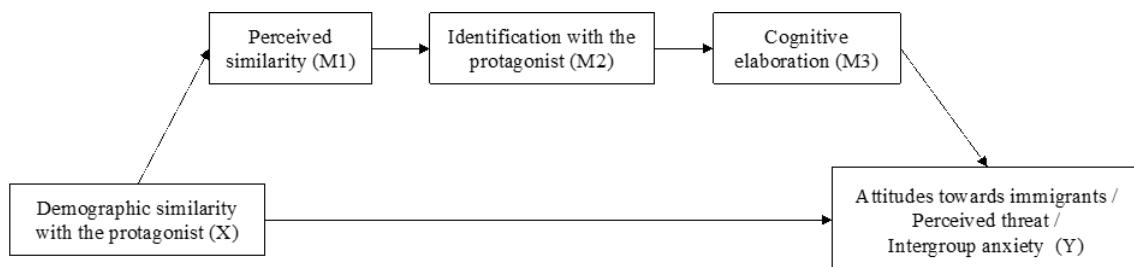


Figure 1. *Hypothesized serial multiple mediation model (H2)*

2. Method

2.1 Procedure and Participants

To test our predictions, an online experiment was conducted using Qualtrics in three European countries simultaneously: Spain (N = 294), Italy (N = 295), and Greece (N = 286). To determine the sample size, a power analysis was carried out using the G*Power program (<http://www.gpower.hhu.de>) (Faul et al., 2007). The calculation of the sample size depends on several factors such as the type of design, the effect size observed in previous studies (or in meta-analysis reviews), the type I error (α), and the statistical power ($1 - \beta$). Two meta-analysis studies were considered to obtain a measure of the effect size: Banas et al. (2020), about the effect of positive mediated contact on prejudice reduction ($r = -.23$), and Braddock and Dillard (2016) focused on the effect of exposure to a narrative on attitudes ($r = .19$). Thus, assuming an effect size of .19 (Cohen's $d = 0.387$), an α value of .05, a power of .80, and a two-group design, the G*Power program indicated that a sample size of 212 participants would be necessary. Assuming an effect size of $r = -.23$ (Cohen's $d = -0.473$), the G*Power program indicated that a sample size of 144 participants would be required. For this reason, the study was designed to access a sample larger than 200 participants in each country. In each of these three countries, quotas were set based on gender, age, educational level, and employment status, to obtain different demographic profiles.

The online questionnaire consisted of three blocks: pre-test measures, experimental manipulation, and post-test measures. The first block collected information on sociodemographic variables, as well as place of birth (including only those people born in the countries where the study was carried out and whose parents also originated from those countries), political ideology, national identification, and frequency of contact with immigrants. The participants were then subjected to experimental manipulation by viewing an audiovisual piece of EE fiction.

The independent variable in this study was demographic similarity with the protagonist (a transitional character), adopting a two-group randomized design. To generate the similarity with the protagonist of the message, the variables gender, age, employment status, and educational level were varied in the messages, resulting in 16 different versions of the audiovisual piece for each country (thus a total of 48 messages). In the high-similarity condition, the participants were exposed to a message whose protagonist had the same sociodemographic characteristics as them. For example, an unemployed young (18-39-year-old) woman with a low academic level saw an audiovisual piece whose protagonist was an unemployed young (35-year-old) woman with a low academic level. On the other hand, in the low-similarity condition, a participant with the profile of an unemployed young (18–39-year-old) woman with low academic level watched an audiovisual piece whose protagonist was an employed middle-aged (50-year-old) man with a high academic level. After viewing the audiovisual EE message, the post-test measures were presented using questions to evaluate the effectiveness of the experimental manipulation of demographic similarity (perceived similarity), as well as measures on identification with the protagonist, cognitive elaboration, attitudes toward immigration, intergroup anxiety, and perceived threat (see Table 1).

Since Qualtrics enables the application of a series of quality controls, the questionnaire was designed such that it could only be completed in a single session. In addition, we only counted as valid cases those participants who took between 225 seconds (3:45 minutes) and 3,600 seconds (45 minutes) to complete the questionnaire ($M = 1003.42$ seconds, $SD = 550.42$ seconds) and between 210 and 300 seconds ($M = 239.66$ seconds, $SD = 11.56$ seconds) to view the audiovisual narration (with duration 210–220 seconds) and who correctly answered a control question included in the questionnaire.

2.2 Experimental Stimulus Materials

The entertainment-educational message used as an experimental stimulus was a fictional audiovisual narrative that did not include dialogues. This was done to avoid having to create pieces for each country with different actors or actresses. The model adopted in the design of the entertainment-education message drew on the plot of the film *Gran Torino* (Eastwood, 2008). In this film, the protagonist evolves from a position of rejection of immigrants toward a positive, accepting attitude. This change is promoted by a series of incidents and by establishing positive contact with immigrant neighbors.

In the present study, the demographic similarity with the transitional character was manipulated, considering four sociodemographic variables simultaneously (gender, age, employment status, and educational level). This allowed us to create 48 audiovisual pieces (16 for each country). The present design therefore addresses one of the main criticisms of experimental research in media psychology, i.e., the use of a single message per experimental condition (Reeves et al., 2016; Slater et al., 2015). Moreover, it is important to note that professional actors and actresses participated in the creation of the narrative messages. These actors and actresses (Fig. 2) were selected in a previous pilot study, in which they were evaluated in terms of phenotypic representativeness of the Spanish, Greek and Italian population and having desirable characteristics such as attractiveness or generating trust and sympathy. In addition, the whole production of the pieces was carried out by a professional team hired specifically for this project.



Figure 2. *Actors and actresses*

The produced short (duration 3:30 minutes) was entitled 'Neighbors' and described the daily life of a person who presented themselves as a native of each country. Its

protagonist was a transitional character who showed an initial negative attitude toward immigration but evolved toward a positive attitude. The initial attitude of the protagonist and the different topics of hate speech that center the narration were shown by using Twitter messages appearing on-screen as floating text. In addition, the socio-economic profile of the protagonist was shown using specific visual cues.

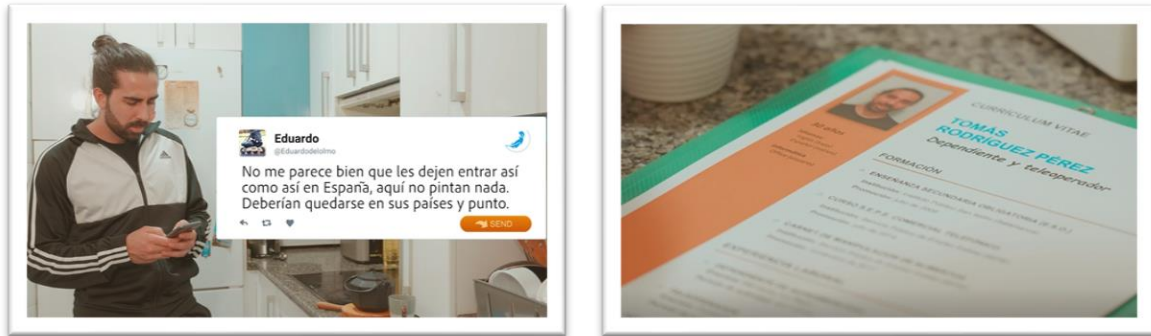


Figure 3. Screenshots from 'Neighbors'. Visual cues

At the start of the story, it is seen how the protagonist discovers that their new neighbor has common hobbies (like skating and tea) but did not know that he was an immigrant. However, an incident occurs that causes the protagonist to discover that the new neighbor is an immigrant. When the elevator in the house breaks down, the protagonist is trapped and the new neighbor comes to their aid, thereby revealing that they are an immigrant (a person from a North African or Maghreb country). At that moment of stress, the protagonist manifests intergroup anxiety and moves away from him.



Figure 4. Screenshots from 'Neighbors'. Plot twist and intergroup anxiety

In the final part of the piece, after reflecting on their recent behavior, the protagonist is observed to help the immigrant change a light bulb on the landing of his/her home. In this way, the protagonist experiences a process of cognitive dissonance that leads to a change in attitude toward immigration, resulting in a reduction in intergroup anxiety and perceived threat.



Figure 5. Screenshots from 'Neighbors'. Attitudinal change

2.3 Measures

To measure the main variables of the present investigation, the following measurement scales were used (appropriately translated for each language):

Table 1a
Pretest variables

	Response options	Cronbach's α		
		Greece	Italy	Spain
National identification	1 (strongly disagree) – 7 (strongly agree)	.612	.644	.688
<ul style="list-style-type: none"> • I often think of myself as a Greek/Italian/Spanish person • I consider myself a typical Greek/Italian/Spanish person • I'm proud to be Greek/Italian/Spanish • If someone speaks badly of Greek/Italian/Spanish people, I feel as if they have said something bad about me 				

Table 1b
Post-test variables

	Response options	Cronbach's α		
		Greece	Italy	Spain
Perceived similarity	1 (strongly disagree) – 7 (strongly agree)	.744	.808	.761
<ul style="list-style-type: none"> • [protagonist's name] has demographic characteristics (such as gender or age) that are very similar to mine • Considering the employment situation of [protagonist's name], I think I have many things in common with this person • From what I have seen in the video, I would say that the living conditions of [protagonist's name] are very similar to mine • I think [protagonist's name] has a similar level of education to mine 				
Identification with the protagonist	1 (not at all) – 5 (a lot)	.938	.933	.941
<ul style="list-style-type: none"> • I felt emotionally involved with [protagonist's name]'s feelings • I felt as if I were [protagonist's name] • I imagined how I would act if I were [protagonist's name] • I was concerned about what was happening to [protagonist's name] • I understood how [protagonist's name] acts, thinks, and feels • I myself experienced [protagonist's name]'s emotional reactions • I tried to imagine [protagonist's name]'s feelings, thoughts, and reactions • I had the impression of living [protagonist's name]'s story myself • I understood [protagonist's name]'s feelings or emotions • I tried to see things from [protagonist's name]'s point of view • I identified with [protagonist's name] 				

Table 1c
Post-test variables

	Response options	Cronbach's α		
		Greece	Italy	Spain
Cognitive elaboration	1 (strongly disagree) – 7 (strongly agree)	.779	.819	.892
<ul style="list-style-type: none"> While watching the video, I reflected intensely on the subject of immigration As the story told by the video progressed, I tried to draw conclusions to adjust my opinion about immigration Watching the video has made me think deeply about the life of immigrants in Greece/Italy/Spain 				
Attitude toward immigrants	0 (very cold feelings) –100 (very warm feelings)	–	–	–
<ul style="list-style-type: none"> How do you feel about immigrant people? 				
Perceived threat	1 (not at all) – 5 (a lot)	.950	.943	.949
<p>To what extent do you feel that the following issues are in danger in Greece/Italy because of immigrants?</p> <ul style="list-style-type: none"> Family values (for example, values toward the elderly, gender equality, how to educate children) Religious beliefs (for example, beliefs, practices, and personal fulfillment of religious obligations or prohibitions) The traditions of our culture (for example, celebration of festivals, Greek/Italian/Spanish traditions). Access to the health system (for example, availability of doctors, ease of receiving necessary care in the hospital) Access to the education system (for example, reservation of places in schools, number of places offered, availability of teachers) Access to the public aid system (for example, housing aid, unemployment aid) 				

Table 1d
Post-test variables

	<i>Response options</i>	<i>Cronbach's α</i>		
		<i>Greece</i>	<i>Italy</i>	<i>Spain</i>
Intergroup anxiety	1 (not at all) – 5 (a lot)	.673	.857	.833
<p>If you had to deal directly with an immigrant person (for example, talk to this person in an elevator where there are no other people), how would you feel?</p> <ul style="list-style-type: none"> • Happy (recoded) • Awkward • Self-conscious • Confident (recoded) • Relaxed (recoded) • Defensive 				

3. Results

Randomization was successful with regard to demographic, ideology, national identification with the country, and contact with immigrants, in all countries. In all three countries, it was also observed that people assigned to the high-similarity condition showed greater perceived similarity with the protagonist of the message than those assigned to the low-similarity condition (see Table 2). However, demographic similarity did not significantly influence identification with the protagonist.

Table 2

*Effect of the experimental condition (low versus high similarity with the protagonist) on perceived similarity and identification. Student's *t* test*

(a) Country: Greece

		Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Perceived similarity with the protagonist	Low-similarity condition	3.42	1.25	-6.81	284	.000
	High-similarity condition	4.42	1.23			
Identification with the protagonist	Low-similarity condition	2.68	0.99	-1.26	284	0.206
	High-similarity condition	2.83	0.89			

(b) Country: Italy

		Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Perceived similarity with the protagonist	Low-similarity condition	3.65	1.41	-5.13	293	.000
	High-similarity condition	4.45	1.26			
Identification with the protagonist	Low-similarity condition	2.92	0.92	-0.43	293	.665
	High-similarity condition	2.96	0.90			

(b) Country: Spain

		Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Perceived similarity with the protagonist	Low-similarity condition	3.40	1.30	-7.93	292	.000
	High-similarity condition	4.48	1.00			
Identification with the protagonist	Low-similarity condition	2.83	0.91	0.94	292	.344
	High-similarity condition	2.73	0.89			

To test the first hypothesis, the PROCESS macro was used (model 4, using 10,000 bootstrapping samples to generate 95% confidence intervals by the percentile method; Hayes, 2018). In all three countries, it was observed that demographic similarity increased identification through perceived similarity, thus confirming H1 (see Table 3 and Figure 6).

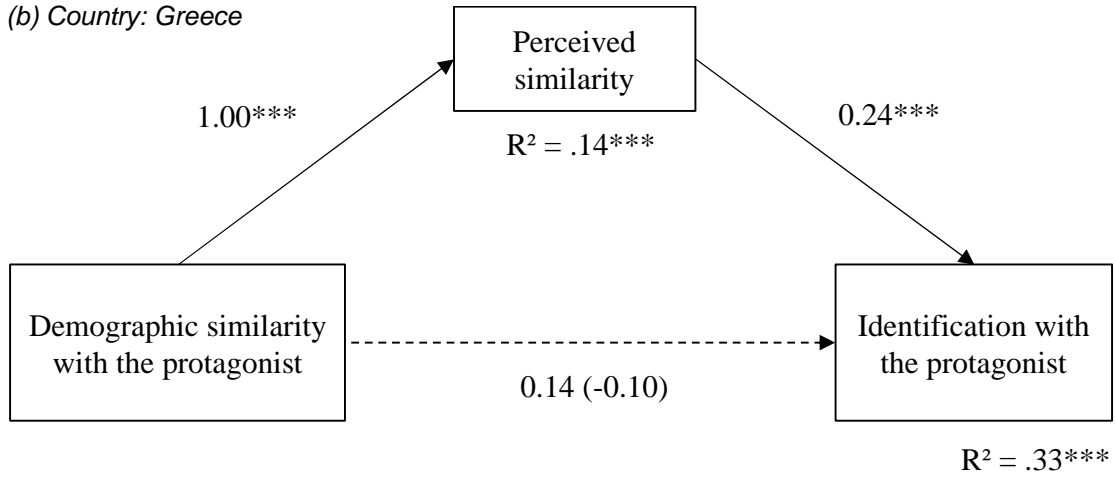
Table 3

Indirect effects of demographic similarity with the protagonist on identification through perceived similarity. Mediation models with PROCESS (model 4)

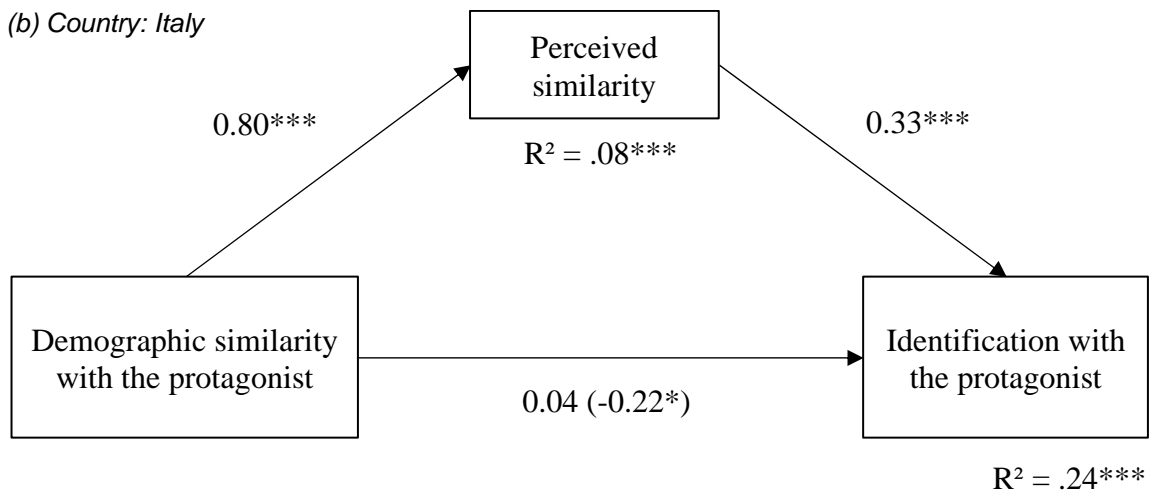
Indirect effects	<i>Effect</i>	<i>Boot SE</i>	<i>Boot 95% CI</i>
Similarity → Perceived similarity → Identification			
Greece	0.24	0.06	[0.135, 0.379]
Italy	0.27	0.06	[0.155, 0.399]
Spain	0.34	0.05	[0.239, 0.459]

Note: We used 95% percentile bootstrap confidence intervals based on 10,000 bootstrap samples for statistical inference of 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 effect is equal to 0, that is, there is not an association between the variables involved (Hayes, 2018).

(b) Country: Greece



(b) Country: Italy



(b) Country: Spain

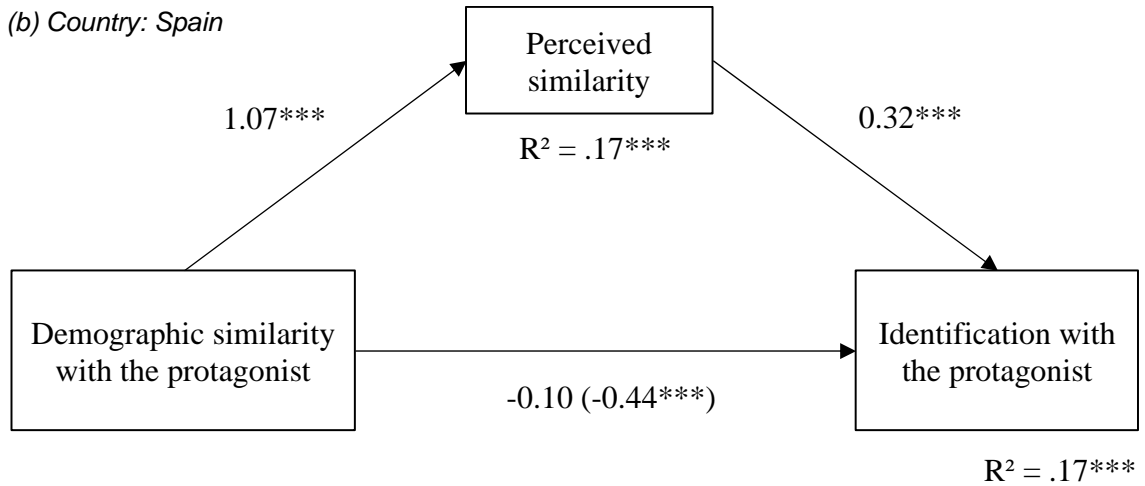


Figure 6. Results of the mediation analysis (H1). PROCESS (model 4)

Note. The figures show the nonstandardized regression coefficients, B. The coefficients of the direct effects appear in parentheses. Dashed lines represent nonsignificant coefficients. ** $p < 0.01$, *** $p < 0.001$.

Finally, to test hypothesis 2, a serial multiple mediation model (model 6) was used, including perceived similarity, identification, and cognitive elaboration as mediating variables. The results were also convergent in all three countries (see Table 4 and Figure 7), revealing that identification with the protagonist was associated with greater cognitive elaboration, which, in turn, was associated with a more positive attitude toward immigrants, less intergroup anxiety, and less perceived threat.

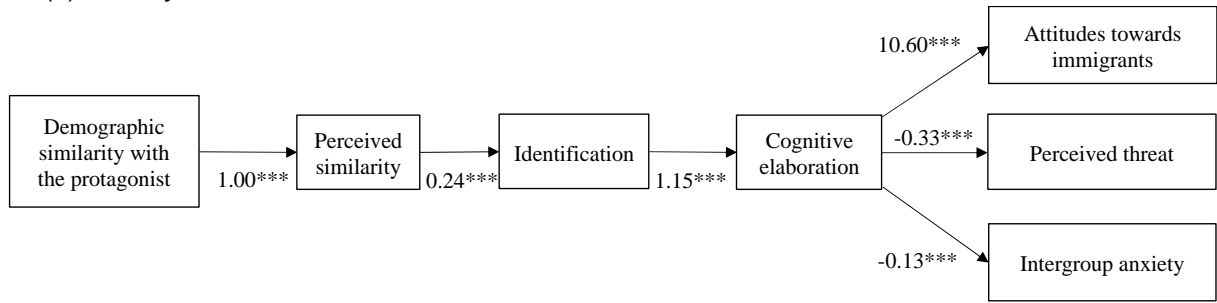
Table 4

Specific indirect effects of demographic similarity with the protagonist on attitudes toward immigrants, perceived threat, and intergroup anxiety through perceived similarity, identification, and cognitive elaboration. Serial multiple mediation models with PROCESS (model 6)

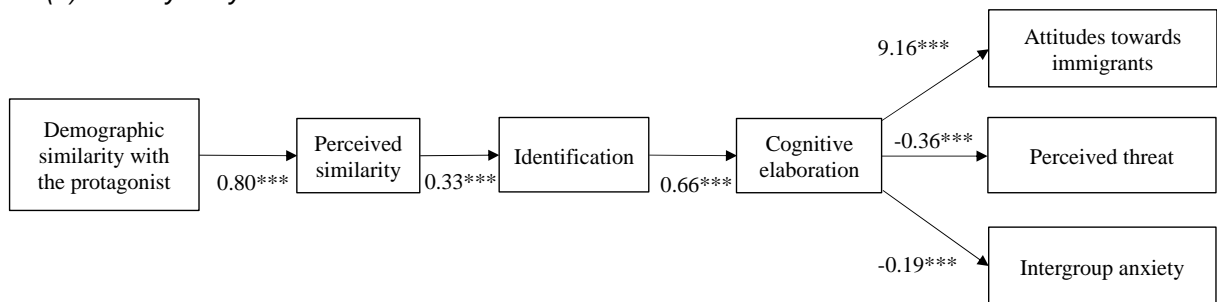
Specific indirect effects	Effect	Boot SE	Boot 95% CI
Similarity → Perceived similarity → Identification → Cognitive elaboration → Attitudes toward immigrants			
Greece	1.73	0.55	[0.830, 2.959]
Italy	2.86	0.78	[1.500, 4.563]
Spain	2.14	0.57	[1.160, 3.388]
Similarity → Perceived similarity → Identification → Cognitive elaboration → Perceived threat			
Greece	-0.05	0.01	[-0.095, -0.026]
Italy	-0.11	0.03	[-0.181, -0.057]
Spain	-0.07	0.02	[-0.122, -0.037]
Similarity → Perceived similarity → Identification → Cognitive elaboration → Intergroup anxiety			
Greece	-0.02	0.00	[-0.039, -0.008]
Italy	-0.06	0.02	[-0.107, -0.025]
Spain	-0.04	0.01	[-0.074, -0.017]

Note: We used 95% percentile bootstrap confidence intervals based on 10,000 bootstrap samples for statistical inference of the specific indirect effects. A specific 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 specific indirect effect is equal to 0, that is, there is not an association between the variables involved (Hayes, 2018).

(a) Country: Greece



(b) Country: Italy



(c) Country: Spain

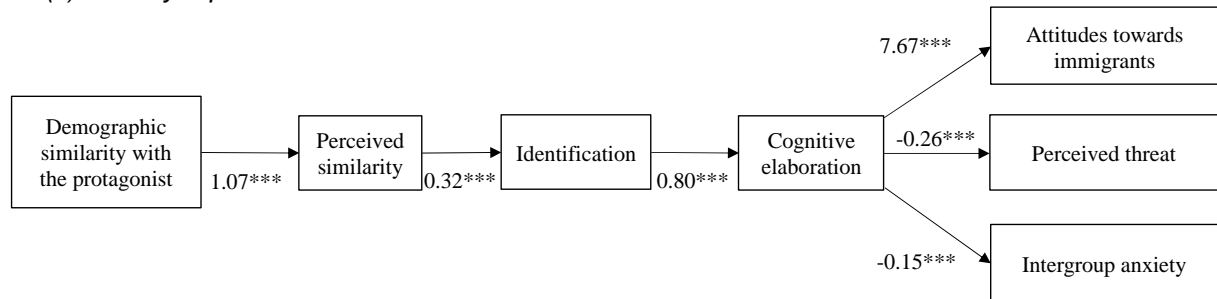


Figure 7. Results of the serial multiple mediation models (H2). PROCESS (model 6)

Note. The figures show the nonstandardized regression coefficients, B. *** $p < .001$.

4. Conclusions and Discussion

To the best of our knowledge, this project is the first to focus on reducing prejudice toward immigrants using narrative EE messages to be carried out in three countries simultaneously. Previous works on reducing prejudice toward immigrants have used testimonial messages with immigrants as protagonists (e.g., Guerrero-Martín & Igartua, 2019), documentary-style television shows (Moyer-Gusé et al., 2019; Müller, 2009), and EE messages with immigrants as protagonists (Murrar & Brauer, 2018). In this work, we chose to give prominence to citizens of the host country who initially harbored negative attitudes toward immigrants but evolved toward a positive position.

The results obtained were consistent among the three countries. It was found that the demographic similarity with the transitional character exerts an indirect effect on identification through the perceived similarity, a result that is in accordance with previous studies (Ooms et al., 2019; Tukachinsky, 2014). In addition, the indirect effect of demographic similarity on the dependent variables is confirmed, through three mediating mechanisms (perceived similarity, identification, and cognitive elaboration). We hereby advance knowledge on the psychological processes that explain the impact of narrative EE messages, going beyond models that propose that a reduction of counterarguing or reactance is the catalyst for persuasive impact (Moyer-Gusé, 2008; Slater & Rouner, 2002).

In this sense, we consider that an EE message whose protagonist undergoes an attitudinal transformation can serve as inspiration by stimulating deep cognitive processing, so that people question their previous opinions and adjust their attitude toward immigration.

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ABOUT PHARM (2020-2022)

Preventing Hate against Refugees and Migrants (PHARM)

Migration to Europe has grown in the last years in scale and complexity. The so called 'refugee crisis' and the migratory pressure is particularly acute in southern EU countries as the main entrance to the EU.

The main goal of PHARM project is to monitor and model hate speech against refugees and migrants in Greece, Italy and Spain in order to predict and combat hate crime and also counter its effects using cutting-edge techniques, such as data journalism and narrative persuasion. The activities distributed in 5 coordinated work packages include:

(i) Implementation of a conceptual and methodological common framework for large-scale analysis and detection of hate speech; (ii) Implementation and evaluation of machine learning approaches to model and predict hate crimes against refugees and migrants based on hate speech features; (iii) Survey journalists to understand how they inform and raise awareness about hate speech and how they can help building and disseminating counter-narratives based in data-driven news pieces; (iv) Creation, evaluation and dissemination of counter-narrative fictional stories adapted to different characteristics of citizens using large-scale narrative persuasion.

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