Extended Abstract

Story-Driven Insights: How Transitional Characters and Positive Role Models in Entertainment-Education Narratives Shape Outgroup Attitudes

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Abstract

This study presents the results of a pre-registered online experiment with Qualtrics panelists (*N* = 927), examining the impact of Entertainment-Education (EE) stories through the lens of narrative persuasion and inspiring narratives. It focuses on the effect of character type (transitional character and positive role model) on identification with the protagonist and also examines the mediating role of psychological insight in the context of improving attitudes toward stigmatized groups (immigrants). The hypothesis suggests that EE stories featuring positive role models can improve attitudes by fostering identification and triggering insight (a process of sudden understanding, illumination or revelation), especially in individuals with low modern racism. This conditional-indirect effects model was tested using a 3 x 3 between-subjects factorial design, manipulating character type (control, transitional character, positive role model) and type of negative immigration rumor ("immigration increases crime," "immigrants are taking our jobs," "immigrants receive more public assistance"). Short EE narratives designed to debunk negative rumors about immigration were produced. Before watching the videos, participants' demographics and modern racism were measured. After viewing, identification with the protagonist, psychological insight, and dependent variables (e.g., attitudes toward immigrants) were assessed. Results indicate that modern racism moderates the effect of character type on identification. Identification also activates psychological insight, which significantly impacts outcome measures. This study advances understanding of how EE narratives improve outgroup attitudes through character-driven psychological insights.

Keywords: Entertainment–education, narrative persuasion, eudaimonic entertainment, positive role model, transitional character, identification with the protagonist, psychological insight, outgroup attitudes, modern racism.

This study focuses on how the attitudes of protagonists in Entertainment-Education (EE) narratives shape audience attitudes toward stigmatized groups in this case, immigrants. Our work integrates research on EE and narrative persuasion (Frank & Falzone, 2021) with contemporary theories of entertainment processing, particularly those related to eudaimonic or inspiring media (Moyer-Gusé & Wilson, 2024; Oliver et al., 2021).

EE narratives are storytelling formats that aim to entertain while simultaneously delivering educational or pro-social messages (Wang & Singhal, 2021). Typically, EE narratives feature three types of characters (e.g., Bandura, 2004). Negative role models exhibit the undesirable attitudes and behaviors the narrative seeks to change (for example, a character with openly racist views). Positive role models consistently express supportive attitudes, such as a character who openly advocates for immigrants in conversations. Lastly, transitional characters evolve over the course of the narrative, shifting from negative to positive attitudes (Moyer-Gusé et al., 2019). Despite the relevance of character types in EE narratives, there is surprisingly little research examining their specific roles and effects. Our work examines how protagonists' attitudes in EE narratives shape audience responses toward immigrants, exploring the mechanisms behind this influence.

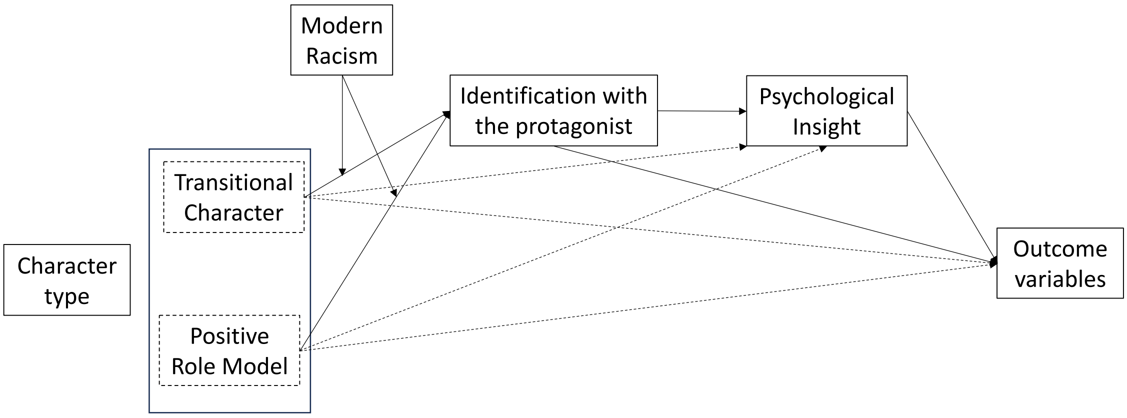
Previous studies on EE and prejudice reduction have shown that identification is a key mechanism influencing attitudes (e.g., Igartua, González-Vázquez, & Arcila, 2024). Our study introduces a second mechanism—*psychological insight*—to understand how EE narratives influence attitudes toward stigmatized groups. Psychological insight (informally referred to as the "Aha! Moment"; e.g., Kounios & Beeman, 2009) is defined as a cognitive reception process involving a sudden discovery and a sense of enlightenment or inner revelation, often triggered by exposure to inspiring narratives (Igartua, Oliver et al., 2024). We propose that identification with characters initiates the process of psychological insight, resulting in a significant impact on attitudes.

In line with recent calls to explore differential susceptibility to mediated communication (Valkenburg & Peter, 2013), we also examine the moderating role of participants' levels of modern racism (McConahay, 1986). Modern racism represents a more subtle form of prejudice, characterized by ambivalent reactions toward immigrants. It is expected that individuals with lower levels of prejudice will identify more strongly with a positive role model, as the character's supportive attitudes toward immigration align with these individuals' own beliefs (H1). Conversely, individuals with high levels of modern racism are expected to identify less with both positive role models and transitional characters, as these characters convey messages that are counter to their previous attitudes (H2).

We hypothesize a conditional indirect effect of character type on liking the story, intention to share the narrative, attitudes toward immigrants, and prosocial behavior, mediated serially by identification with the protagonist and psychological insight (Figure 1). For individuals with low modern racism (H3), exposure to a positive role model (versus control) will enhance identification, triggering psychological insight and resulting in greater liking of the story, higher intentions to share the narrative, more positive attitudes toward immigrants, and increased prosocial behavior. Conversely, for those with high modern racism (H4), exposure to either positive role models or transitional characters (versus control) will lead to lower identification, reducing psychological insight and negatively affecting liking of the story, intentions to share, attitudes toward immigrants, and prosocial behavior.

Figure 1

Hypothesized conditional-indirect effects model (H2)



Method[1]

To test our predictions, a pre-registered (https://osf.io/xnwb5) online experiment with Qualtrics panelists was carried out ($N = 927$, $M_{age} = 45.36$ years, $SD = 13.57$; 49.2% men and 50.7% women), setting quotas for sex, age, and education[2]. To determine the sample size a power analysis was carried out using the G*Power program (Faul et al., 2007) (Appendix 1). Additionally, a pilot study ($N = 245$) was conducted using short written narratives based on the scripts (Appendix 2).

The main study employed a 3 × 3 between-subjects factorial design, manipulating two independent variables: the type of character (protagonist's attitude towards immigration: control group, transitional character, and positive role model) and the type of negative rumor against immigration focused on in the story (in a critical incident at the end of the story). To enhance the study's external validity, we opted for audiovisual narratives that covered three different negative rumors against immigration.

The online questionnaire consisted of three blocks: pre-test measures, experimental manipulation, and post-test measures. The first block collected information on sociodemographic variables, political ideology, modern racism scale (McConahay, 1986; Igartua et al. 2019), and the Ten-Item-Personality Inventory (TIPI; Gosling et al., 2003)[3]. The participants were then subjected to experimental manipulation by viewing an EE audiovisual narrative (Appendix 3). After viewing the EE audiovisual narrative, the post-test measures were presented using questions to evaluate the effectiveness of the experimental manipulation[4] as well as the outcomes variables[5].

Results

To test H1 and H2, the PROCESS macro was used (model 1; Hayes, 2022). The results showed that modern racism moderated the effect of character type on identification with the protagonist (Table 1).

Table 1

Modern racism as a moderator in the relationship between character type and identification with the protagonist. Moderation analysis using PROCESS (Model 1)

	Outcome variable: Identification with the protagonist			
Model summary: $R^2 = .12, p < .001$	*B*	*SE*	*t*	*p*
Constant	3.84	0.12	29.99	<.001
Transitional character vs. control (X1)	0.43	0.18	2.39	.016
Positive role model vs. control (X2)	0.71	0.18	3.96	<.001
Modern racism (MR)	−0.04	0.03	−1.55	.119
Interaction X1 × MR	−0.16	0.04	−3.86	<.001
Interaction X2 × MR	−0.19	0.04	−4.47	<.001

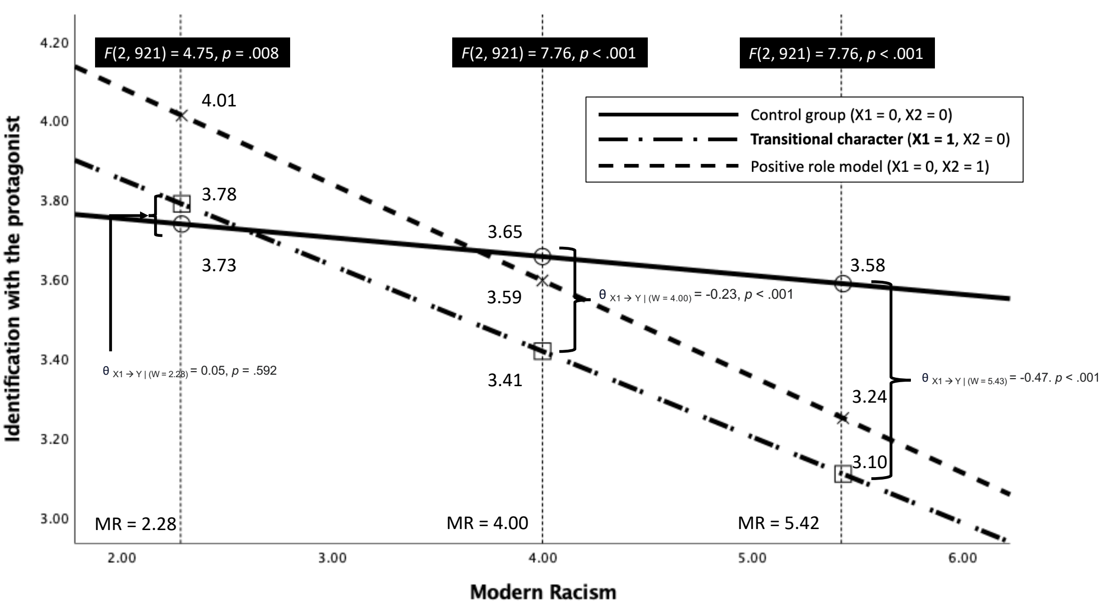
Note.- The experimental condition is a multicategorical variable with three values: 1 = control group (the protagonist does not express his attitudes toward immigrants), 2 = transitional character, and 3 = positive role model. X1 and X2 are dummy-coded variables created using indicator coding, with the control group as the reference category. In X1, 0 = control group and 1 = transitional character; in X2, 0 = control group and 1 = positive role model. Modern racism (MR) is a composite measure with values from 1 (low) to 7 (high).

In line with H1, participants with low levels of modern racism showed greater identification with the protagonist in the EE narrative featuring a positive role model compared to the control group narrative ($\theta_{X2 \rightarrow \text{Identification}} = 0.27$, $p = .003$). Likewise, in line with H2, it was observed that participants with high levels of modern racism showed lower identification with the transitional character ($\theta_{X1 \rightarrow \text{Identification}} = -0.47$, $p < .001$) and the positive role model ($\theta_{X2 \rightarrow \text{Identification}} = -0.33$, $p < .001$) compared to the protagonist of the control group narrative[6] (Figure 2).

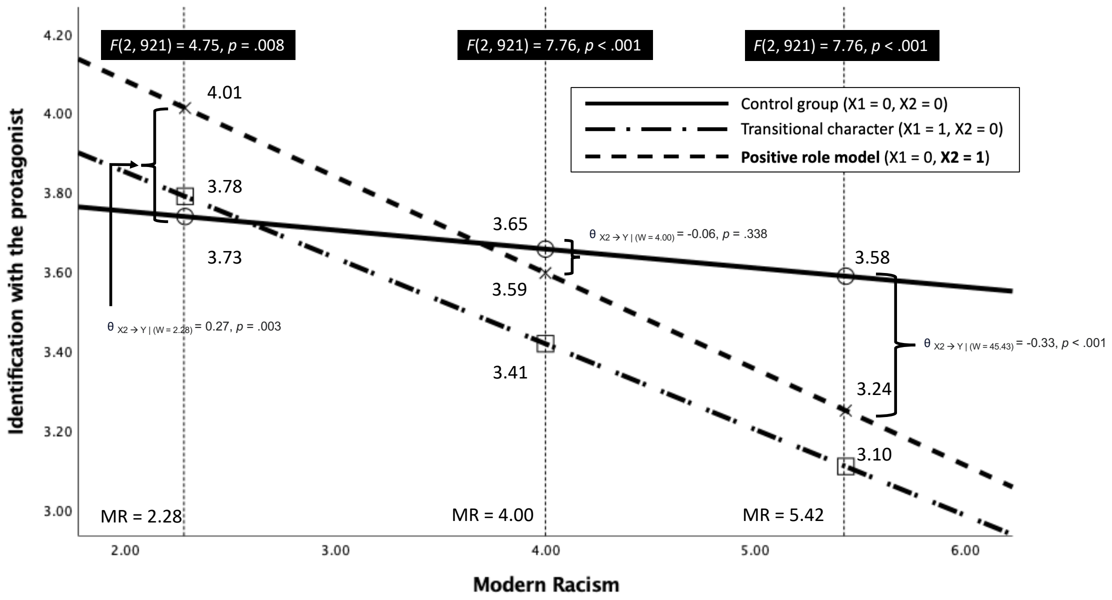
Figure 2

Relative conditional effects of transitional character (X1) compared to control group (a) and positive role model (X2) compared to control group (b), across levels of modern racism

(a) Transitional character versus control group



(b) Positive role model versus control group



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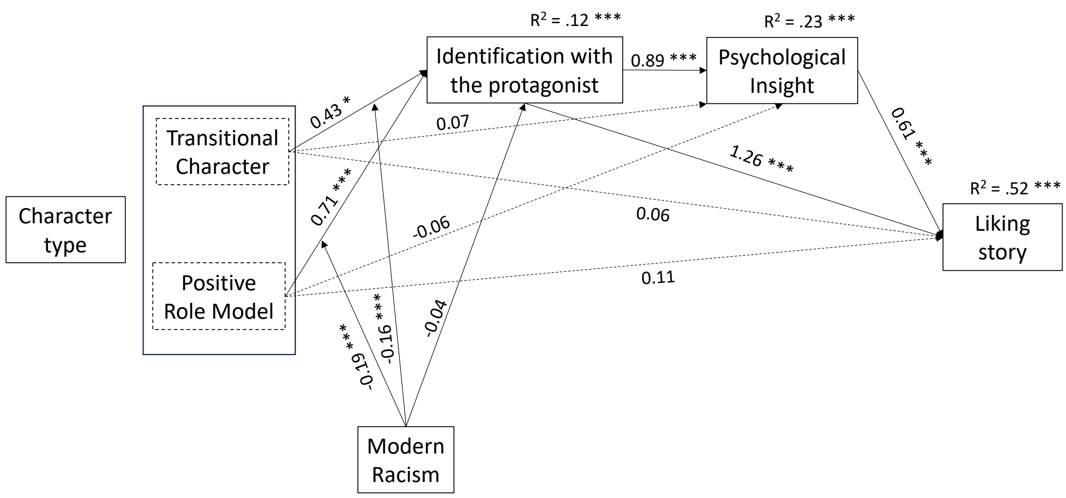
To test H3 and H4, the PROCESS macro was used (model 83). It was observed that identification with the protagonist served as a significant mediating mechanism on its own (Figure 3). Additionally, in three of the four variables considered, psychological insight was found to be a significant secondary mediator (Tables 2, 3, 4, and 5)[7].

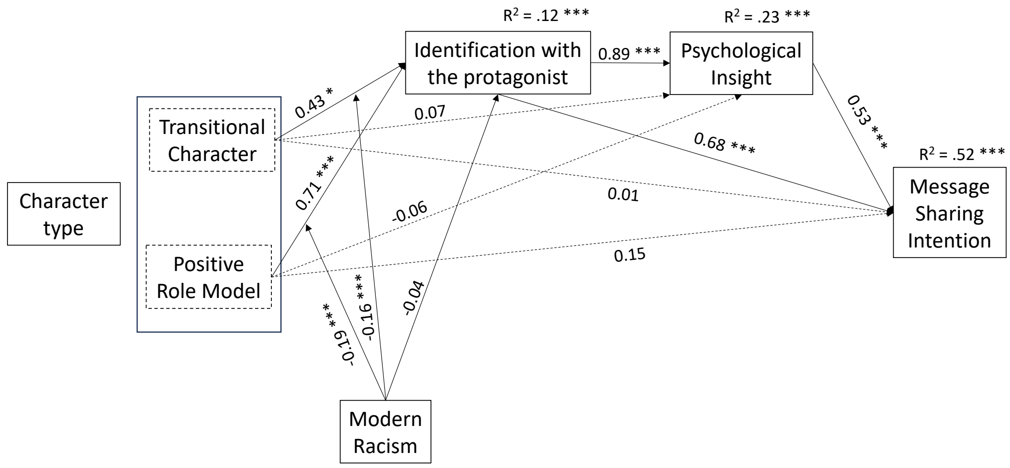
Figure 3

Relative-conditional indirect effects of character type (transitional character and positive role model versus control group) on liking (a), intention to share the video (b), attitudes toward immigrants (c), and prosocial behavior (d)

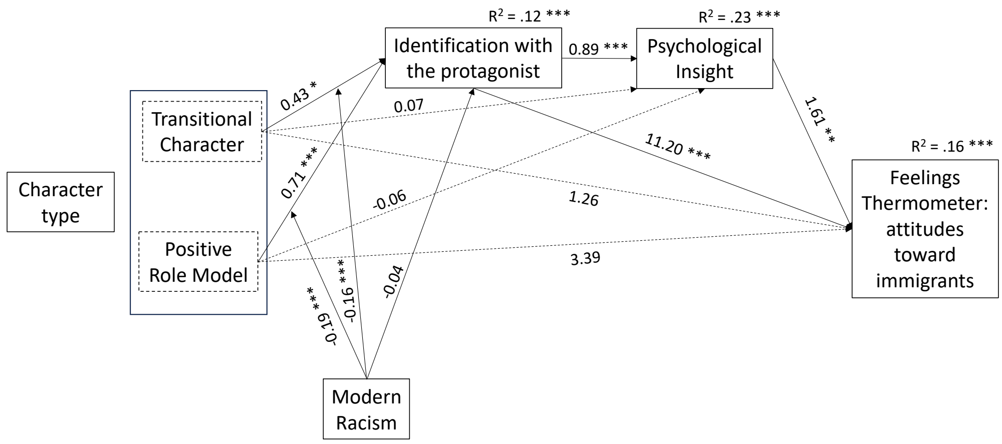
(a) Outcome variable: *liking*



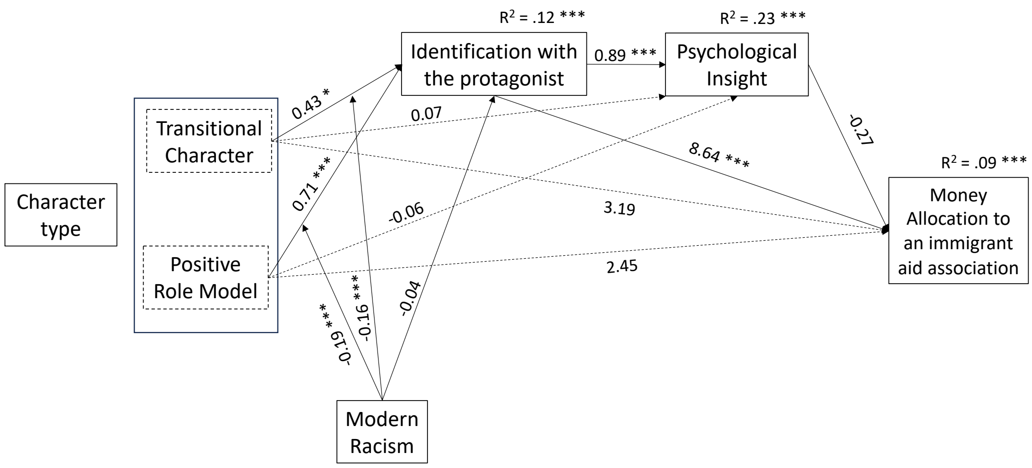
(b) Outcome variable: *intention to share the video*



(c) Outcome variable: *attitudes toward immigrants*



(d) Outcome variable: *prosocial behavior*



Note.- The experimental condition is a multicategorical variable with three values: 1 = control group (the protagonist does not express his attitudes toward immigrants), 2 = transitional character, and 3 = positive role model. X1 and X2 are dummy-coded variables created using indicator coding, with the control group as the reference category. In X1, 0 = control group and 1 = transitional character; in X2, 0 = control group and 1 = positive role model. Modern racism (MR) is a composite measure with values from 1 (low) to 7 (high).

Table 2

Relative conditional and unconditional indirect effects of character type on liking through identification with the protagonist and psychological insight

(a) Transitional character versus control group (X1)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.06 (0.12)	-0.18	0.32
X1: transitional character	4.00	-0.30 (0.08)	-0.47	-0.13
	5.42	-0.60 (0.13)	-0.87	-0.35
IMM = -0.21 (0.06) [95% CI: -0.34, -0.08]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X1: transitional character		0.04 (0.06)	-0.08	0.18
Relative conditional indirect effects of character type on liking via *Identification with the protagonist → Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.02 (0.05)	-0.08	0.13
X1: transitional character	4.00	-0.13 (0.03)	-0.21	-0.05
	5.42	-0.26 (0.06)	-0.39	-0.14
IMM = -0.09 (0.02) [95% CI: -0.15, -0.03]				

(b) Positive role model versus control group (X2)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.34 (0.11)	0.12	0.57
X2: positive role model	4.00	-0.07 (0.07)	-0.23	0.07
	5.42	-0.42 (0.12)	-0.68	-0.18
IMM = -0.24 (0.05) [95% CI: -0.36, -0.13]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X2: positive role model		-0.03 (0.06)	-0.17	0.09
Relative conditional indirect effects of character type on liking via *Identification with the protagonist → Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.15 (0.05)	0.05	0.25
X2: positive role model	4.00	-0.03 (0.03)	-0.10	0.03
	5.42	-0.18 (0.05)	-0.30	-0.07
IMM = -0.10 (0.02) [95% CI: -0.16, -0.05]				

Note.- The experimental condition is a multicategorical variable with three values: 1 = control group (the protagonist does not express his attitudes toward immigrants), 2 = transitional character, and 3 = positive role model. X1 and X2 are dummy-coded variables created using indicator coding, with the control group as the reference category. In X1, 0 = control group and 1 = transitional character; in X2, 0 = control group and 1 = positive role model. MR = modern racism. IMM = Index of Moderated Mediation.

Table 3

Relative conditional and unconditional indirect effects of character type on message sharing intention through identification with the protagonist and psychological insight

(a) Transitional character versus control group (X1)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.03 (0.07)	-0.09	0.17
X1: transitional character	4.00	-0.16 (0.04)	-0.25	-0.07
	5.42	-0.32 (0.07)	-0.47	-0.18
IMM = -0.11 (0.03) [95% CI: -0.18, -0.04]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X1: transitional character		0.04 (0.05)	-0.07	0.16
Relative conditional indirect effects of character type on liking via *Identification with the protagonist* → *Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.02 (0.04)	-0.07	0.12
X1: transitional character	4.00	-0.11 (0.03)	-0.18	-0.05
	5.42	-0.23 (0.05)	-0.33	-0.13
IMM = -0.08 (0.02) [95% CI: -0.13, -0.03]				

(b) Positive role model versus control group (X2)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.18 (0.06)	0.06	0.31
X2: positive role model	4.00	-0.04 (0.04)	-0.12	0.04
	5.42	-0.23 (0.06)	-0.37	-0.10
IMM = -0.13 (0.03) [95% CI: -0.19, -0.07]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X2: positive role model		-0.03 (0.06)	-0.14	0.08
Relative conditional indirect effects of character type on liking via *Identification with the protagonist* → *Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.13 (0.04)	0.04	0.22
X2: positive role model	4.00	-0.02 (0.03)	-0.08	0.02
	5.42	-0.16 (0.05)	-0.26	-0.06
IMM = -0.09 (0.02) [95% CI: -0.14, -0.05]				

Note.- The experimental condition is a multicategorical variable with three values: 1 = control group (the protagonist does not express his attitudes toward immigrants), 2 = transitional character, and 3 = positive role model. X1 and X2 are dummy-coded variables created using indicator coding, with the control group as the reference category. In X1, 0 = control group and 1 = transitional character; in X2, 0 = control group and 1 = positive role model. MR = modern racism. IMM = Index of Moderated Mediation.

Table 4

Relative conditional and unconditional indirect effects of character type on feelings thermometer (attitudes toward immigrants) through identification with the protagonist and psychological insight

(a) Transitional character versus control group (X1)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.57 (1.14)	-1.62	2.88
X1: transitional character	4.00	-2.67 (0.76)	-4.22	-1.22
	5.42	-5.37 (1.25)	-8.00	-3.05
IMM = -1.89 (0.59) [95% CI: -3.11, -0.78]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X1: transitional character		0.12 (0.19)	-0.23	0.55
Relative conditional indirect effects of character type on liking via *Identification with the protagonist → Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.07 (0.16)	-0.23	0.41
X1: transitional character	4.00	-0.34 (0.16)	-0.72	-0.06
	5.42	-0.69 (0.31)	-1.37	-0.14
IMM = -0.24 (0.12) [95% CI: -0.51, -0.04]				

(b) Positive role model versus control group (X2)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	3.06 (1.00)	1.12	5.10
X2: positive role model	4.00	-0.67 (0.69)	-2.09	0.68
	5.42	-3.79 (1.16)	-6.18	-1.62
IMM = -2.18 (0.53) [95% CI: -3.27, -1.16]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X2: positive role model		-0.09 (0.19)	-0.53	0.26
Relative conditional indirect effects of character type on liking via *Identification with the protagonist → Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.39 (0.20)	0.06	0.88
X2: positive role model	4.00	-0.08 (0.10)	-0.31	0.09
	5.42	-0.49 (0.24)	-1.02	-0.09
IMM = -0.28 (0.13) [95% CI: -0.57, -0.05]				

Note.- The experimental condition is a multicategorical variable with three values: 1 = control group (the protagonist does not express his attitudes toward immigrants), 2 = transitional character, and 3 = positive role model. X1 and X2 are dummy-coded variables created using indicator coding, with the control group as the reference category. In X1, 0 = control group and 1 = transitional character; in X2, 0 = control group and 1 = positive role model. MR = modern racism. IMM = Index of Moderated Mediation.

Table 5
Relative conditional and unconditional indirect effects of character type on money allocation (to an immigrant aid association) through identification with the protagonist and psychological insight

(a) Transitional character versus control group (X1)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	0.43 (0.88)	-1.28	2.20
X1: transitional character	4.00	-2.06 (0.60)	-3.29	-0.92
	5.42	-4.14 (0.95)	-6.11	-2.37
IMM = -1.45 (0.44) [95% CI: -2.37, -0.61]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X1: transitional character		-0.02 (0.08)	-0.24	0.12
Relative conditional indirect effects of character type on liking via *Identification with the protagonist → Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	-0.01 (0.06)	-0.15	0.11
X1: transitional character	4.00	0.05 (0.13)	-0.18	0.33
	5.42	0.11 (0.25)	-0.37	0.64
IMM = -0.04 (0.09) [95% CI: -0.13, 0.23]				

(b) Positive role model versus control group (X2)

Relative conditional indirect effects of character type on liking via *Identification with the protagonist*				
Identification with the protagonist	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	2.36 (0.77)	0.88	3.92
X2: positive role model	4.00	-0.52 (0.53)	-1.61	0.51
	5.42	-2.92 (0.89)	-4.74	-1.26
IMM = -1.68 (0.41) [95% CI: -2.52, -0.90]				
Relative unconditional indirect effects of character type on liking via *Psychological insight*				
Psychological insight		Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
X2: positive role model		0.01 (0.07)	-0.13	0.19
Relative conditional indirect effects of character type on liking via *Identification with the protagonist → Psychological insight*				
Character type	MR	Indirect effect (*SE*)	Boot *LLCI*	Boot *ULCI*
	2.28	-0.06 (0.15)	-0.38	0.23
X2: positive role model	4.00	0.01 (0.04)	-0.06	0.13
	5.42	0.08 (0.18)	-0.27	0.47
IMM = 0.04 (0.10) [95% CI: -0.16, 0.25]				

Note.- The experimental condition is a multicategorical variable with three values: 1 = control group (the protagonist does not express his attitudes toward immigrants), 2 = transitional character, and 3 = positive role model. X1 and X2 are dummy-coded variables created using indicator coding, with the control group as the reference category. In X1, 0 = control group and 1 = transitional character; in X2, 0 = control group and 1 = positive role model. MR = modern racism. IMM = Index of Moderated Mediation.

Conclusions and Discussion

This study underscores the importance of character design in shaping attitudes toward deeply polarized social issues through the use of EE narratives[8]. The findings suggest that both identification with characters and psychological insight are key mechanisms explaining the impact of different character types in EE narratives, supporting recent theories on narrative processing (e.g., Moyer-Gusé & Wilson, 2024). The moderating role of modern racism highlights the nuanced effects of EE narratives, revealing that individuals with low prejudice are more receptive to positive role models, while those with high modern racism resist both positive role models and transitional characters. Overall, this study advances the understanding of EE narratives as tools for social change, offering a framework that integrates identification with the character, psychological insight, and the role of individual differences.

Footnotes

[1] All materials related to the online experiments (pilot and main studies), such as links to the EE audiovisual narratives, scripts, written stories (pilot study), measures, datasets, syntax files, and supplemental materials including additional statistical analysis are available via the Open Science Framework (OSF): https://osf.io/mz7ej/?view_only=66cf3d1ecfbc4f20be98a79860a06f6f

[2] A thorough description of the data cleaning and scrubbing procedures carried out by Qualtrics is provided in the document titled "Instructions provided to Qualtrics & Data Scrub," available in OSF; see also Table S1 in Supplemental Materials.

[3] The TIPI scale was included as a filler to create a buffer between the modern racism scale and the video stimuli, preventing participants from watching the videos immediately after responding to sensitive items.

[4] The effectiveness of the experimental manipulation was contrasted with respect to the type of character that featured in the narrative (transitional character, positive role model, or control group). Those who saw the versions with the transitional character or the positive role model considered that the opinion of the protagonist and the waiter was different, while those who saw the control version considered that the protagonist did not give his opinion (χ^2 (4, N = 927) = 399.30, p < .001). Additionally, statistically significant differences consistent with the experimental manipulation were observed in the items that focused on how the protagonist of the narrative reacted after hearing the negative rumor about immigration (Appendix 4).

[5] Measures: identification with the protagonist (Igartua & Barrios, 2012; Igartua, González-Vázquez, & Arcila, 2024), narrative transportation (Appel et al., 2015), emotional reactions during video viewing (Appel et al., 2019; Igartua et al., 2024; Oliver et al., 2012), appreciation (moving/thought-provoking dimension; Oliver & Bartsch, 2010), psychological insight (Igartua, Oliver et al., 2024, Appendix 4), and liking (participants' overall evaluation of the video), message sharing intention (Barbour et al., 2016), attitude towards immigrants (Wojcieszak et al., 2020), and money allocation to an immigrant aid association (Pizarro et al., 2024). Table S2 in the Supplemental Materials available on OSF provides a comprehensive overview of the measures and the reliability data for those measures.

[6] Moderation analyses were conducted using PROCESS (model 1) concerning the variables of narrative transportation, emotional reactions during video viewing, appreciation (moving/thought-provoking dimension), and psychological insight. Additionally, analyses were carried out for the dependent variables: liking of the story, message sharing intention, attitudes toward immigrants (measured by feeling thermometers), and prosocial behavior (money allocation to an immigrant aid association). These analyses have been included in the Supplemental Materials document available on OSF (Tables S5-S16).

[7] The results were also consistent when the analyses were conducted separately for each type of negative rumor against

immigration (see Tables S17-S28 in the Supplemental Materials document available in OSF).

[8] Moreover, this study advances the field of EE by exploring its potential to improve attitudes toward stigmatized groups, an area that has received less attention compared to health-related interventions (see document titled "Review of Literature on Entertainment-Education" available in OSF).

References

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Appendix 1

Sample Size and Power Analysis (Main Study)

This experiment sought to assess the impact of entertainment-education narratives designing to reduce anti-immigrant rumors on a number of variables related to attitudes and behavioral intentions. To determine the sample size for main study, 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 − β). Three meta-analysis studies were evaluated to obtain a measure of the effect size: Braddock and Dillard (2016), on the effect of exposure to a narrative on attitudes (r = .19), Zhuang and Guindry's (2022), on the effect of narratives in reducing stigma (r = -.095), and Banas et al. (2020), regarding the effect of positive mediated contact on prejudice reduction (r = −.23). Taking the value of Braddock and Dillard (2016) and assuming an effect size of .19 (Cohen's d = 0.387), an α value of .05, power of .80, and a 3 x 3 between-subjects factorial design (9 experimental conditions, to test main effects and their interactions, with 4 degrees of freedom for the interaction effect), the G*Power program indicated that a sample size of 336 participants would be necessary. In the case found by Zhuang and Guindry (2022), the sample would be N = 1,328, whereas it would be N = 231, taking into consideration the analysis of Banas et al. (2020).

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Appendix 2

Description and Main Results of the Pilot Study

The preliminary creation of the video scripts was carried out during the months of November 2023 and January 2024. A pilot study was conducted in February 2024 to test the efficacy of the video scripts for the main study, presented in the form of brief written narratives. In this study, a sample of 245 people over 18 years of age (47.8% men, M_{age} = 45.33 years, *SD* = 13.91), Selected from the panelists available to Qualtrics in Spain, whose father and mother were also born in Spain, was used, with quotas for sex (49.5% men and 50.5% women), age (9.46% aged 18–24 years, 15.54% aged 25–34 years, 21.50% aged 35–44 years, 21.945% aged 45–54 years, and 31.56% aged over 55 years), and education (primary, secondary, and/or high school 42.12%; technical training or university studies 24.14%; and postgraduate university studies 33.74%).

Participants were randomly assigned to read a single written story following a 3 (protagonist's attitude towards immigration: control group, transitional character, and positive role model) × 3 (type of negative rumor against immigration) between-subjects factorial design. An online questionnaire hosted on the Qualtrics platform was developed to collect different measures (pre-test) on sociodemographic data and political ideology. Immediately after reading the narrative, they completed the following measures (post-test): The clarity or degree of message comprehension, perceived credibility, interest, and perceived realism were measured using 7-point Likert scales (ranging from 1 "strongly disagree" to 7 "strongly agree"), as well as questions about the degree of identification (from 1 "not at all" to 5 "a lot"), narrative transportation (from 1 "strongly disagree" to 7 "strongly agree"), appreciation (from 1 "strongly disagree" to 7 "strongly agree"), evaluation of the story (from 0 "did not like it at all" to 10 "liked it very much"), perception of the intention of the story (from 0 "not at all" to 10 "a lot"), perception of the protagonist of the story (from 1 "strongly disagree" to 7 "strongly agree") and experimental manipulation check (from 1 "strongly disagree" to 7 "strongly agree").

The analysis of the results revealed no significant differences between the written narratives created under the different conditions in terms of comprehension (F[8, 236] = 1.246, p = .273), interest (F[8, 236] = 1.196, p = .302), believability (F[8, 236] = 0.471, p = .876), realism (F[8, 236] = 0.559, p = .811), liking (F[8, 236] = 0.662, p = .725), appreciation (fun) (F[8, 236] = 0.568, p = .804), appreciation (thought-provoking) (F[8, 236] = 1.214, p = .2919, appreciation (lasting impression) (F[8, 236] = .889, p = .527), appreciation (suspense) (F[8, 236] = 0.467, p = .878), identification with the protagonist (F[8, 236] = .609, p = .7709, narrative transportation (F[8, 236] = 0.626, p = .756), perceived intent to inform (F[8, 236] = 1.219, p = .289), perceived persuasive intent (F[8, 236] = 0.883, p = .532), perceived intent to entertain (F[8, 236] = 0.684, p = .706), perceived eudaimonic intent (F[8, 236] = 0.917, p = .503), and perception of the protagonist (F[8, 236] = 0.48, p = .867). These results are important because they allowed us to conclude that the different versions of each narrative were similar in terms of the reception processes indicated.

In addition, by means of a one-sample Student's t-test, it was found that, overall, the written narratives were perceived as clear and understandable (M = 6.39, SD = 0.77; t[244] = 48.28, p < .001), interesting (M = 5.93, SD = 1.03; t[244] = 29.28, p < .001), credible (M = 6.35, SD = 0.97; t[244] = 37.59, p < .001) and realistic (M = 6.36, SD = 0.87; t[244] = 42.36, p < .001). In addition, the stories induced identification (M = 3.86, SD = 0.69; t[244] = 19.50, p < .001), narrative transportation (M = 5.51, SD = 0.97; t[244] = 24.33, p < .001), appreciation (fun) (M = 5.48, SD = 1.05; t[244] = 22.02, p < .001), appreciation (thought-provoking) (M =

5.60, $SD = 1.06$; $t[244] = 23.66$, $p < .001$), appreciation (lasting impression) ($M = 4.47$, $SD = 1.32$; $t[244] = 5.57$, $p < .001$), appreciation (suspense) ($M = 4.63$, $SD = 1.35$; $t[244] = 7.33$, $p < .001$). Furthermore, the stories were perceived as messages that seek to inform ($M = 7.05$, $SD = 1.97$; $t[244] = 16.23$, p < .001), persuade ($M = 7.03$, $SD = 1.81$; $t[244] = 17.56$, $p < .001$), entertain ($M = 6.85$, $SD = 1.98$; $t[244] = 14.62$, $p < .001$) and with a high eudaimonic component ($M = 7.86$, $SD = 1.64$; $t[244] = 27.24$, $p < .001$). Finally, the stories had positive ratings ($M = 8.11$, $SD = 1.60$; $t[244] = 30.22$, $p < .001$) and the protagonist was perceived positively ($M = 6.53$, $SD = 0.69$; $t[244] = 57.28$, $p < .001$).

Regarding the manipulation check, it was observed that most participants (97.6%) correctly identified the topic of the comment made by the waiter in the narrative (immigration), and no differences were found between conditions ($\chi^2(24, N = 245) = 22.28$, $p = .563$). As expected, statistically significant differences were observed based on the character (control group, transitional character, or positive role model) in the protagonist's reaction to the waiter's comment. That is, depending on the experimental conditions, participants correctly identified the type of reaction (similar opinion, different opinion, or no opinion) ($\chi^2(4, N = 245) = 85.84$, $p < .001$).

Similarly, differences were observed across the character types on five variables related to the perception of the protagonist's attitude towards immigration, in a manner consistent with the intended experimental manipulation: "It is evident that the protagonist has always had a rather negative attitude towards immigration" ($F[2, 242] = 19.32$, $p < .001$, $\eta^2 = .138$); "In the story, it is not clear whether the protagonist has a positive or negative attitude towards immigration" ($F[2, 242] = 46.23$, $p < .001$, $\eta^2 = .276$); "It seems that the protagonist previously exhibited a rejection towards immigrants, but currently his attitude is more tolerant" ($F[2, 242] = 52.10$, $p < .001$, $\eta^2 = .301$); "In the story, it is observed that the protagonist has changed his opinion about immigration" ($F[2, 242] = 44.09$, $p < .001$, $\eta^2 = .267$); "It is evident that the protagonist has always had a rather positive attitude towards immigration" ($F[2, 242] = 39.42$, $p < .001$, $\eta^2 = .246$).

Appendix 3

Description of the video plots

The EE audiovisual narratives were short stories (4:22 to 4:59 minutes) with a clear protagonist (a middle-aged man). We worked with stories dealing with immigration tangentially so that they can work "under the radar". The topic of immigration was presented at the end of the narrative, when the main character heard a negative rumor against immigration (scene at the bar). This critical incident activated a dialogue between the protagonist (Antonio) and a secondary character (a friend), allowing the protagonist to show his attitudes toward immigration. In one experimental condition (positive role model) the main character showed a positive attitude toward immigration (saying that he always have had positive attitudes toward immigration), in the second condition (transitional character) the protagonist said that before (in the past) he used to have negative attitudes, but now (present) his attitudes were positive. In the control group, the protagonist received an urgent phone call just as he was about to respond to the rumor, forcing him to leave the bar and, therefore, not expressing his attitudes toward immigration. This way, the current attitude of the protagonist toward immigration was showed to the audience only at the end of the story, once the critical incident had taken place, unleashing the dialogue in which the anti-immigration rumor is criticized. The plot of the videos used in the study is described in detail below.

In Scene 1, Antonio, a store owner, faces an accusation of theft when a customer believes she was given incorrect change. Despite the customer's escalating frustration, Antonio remains calm and polite, helping her realize her mistake without conflict. This interaction demonstrates Antonio's patience and courteous demeanor, establishing a baseline for how he handles difficult situations.

In Scene 2, Antonio notices a stranger's wallet fall at a crosswalk and attempts to return it, only to be accused of attempting to steal it. Although the man reacts angrily and accuses him, Antonio remains composed and conciliatory, trying to explain his intentions. This moment reflects Antonio's consistent kindness across scenarios, regardless of others' misunderstandings or hostility.

In Scene 3, Antonio is at a bar with his friend Manuel, where the bartender brings up negative stereotypes about immigrants. Antonio and Manuel's conversation turns to this topic, where each version of the story features a different rumor. The first rumor suggests immigrants increase insecurity by committing theft, the second implies they "take jobs" away from locals, and the third states they receive more public assistance than other groups. Each rumor reinforces a stereotype that Antonio and Manuel discuss, with the bartender's comments serving as a catalyst for the conversation.

Antonio's responses vary across the three-character roles in this scene. As a positive role model, Antonio directly challenges the stereotype by sharing a recent personal experience that debunks it. In the transitional role, Antonio is initially inclined to agree with the stereotype but gradually reflects on his own biases and explains how he reconsidered them based on a recent encounter. In the control group version, Antonio refrains from directly addressing the stereotype, having to answer a phone call.

Appendix 4

Effect of the experimental condition (type of character) on perceptions of the protagonist's attitude toward immigration. Manipulation check (ONEWAY results). Main study

General question: considering how the protagonist of the story reacts to the bartender's comment at the bar, please indicate your level of agreement or disagreement with the following statements.	Experimental condition: type of character					
	Control group *M*(SD)	Transitional character *M*(*SD*)	Positive role model *M*(*SD*)	$F_{(2, 924)}$	*p*	η^2
"It is clear that the protagonist is a person who has always had a rather negative attitude towards immigration"	2.94_a (1.47)	3.71_b (1.84)	2.07_c (1.44)	81.43	<.001	.150
"It is not clear from the story whether the protagonist has a positive or negative attitude towards immigration"	4.53_a (1.64)	3.04_b (1.61)	2.28_c (1.51)	159.08	<.001	.256
"It can be seen that the protagonist used to show an attitude of rejection towards immigrants, but nowadays his attitude is more tolerant"	3.52_a (1.48)	5.16_b (1.52)	3.59_a (1.89)	98.73	<.001	.176
"The story shows that the protagonist has changed his opinion on immigration"	3.53_a (1.52)	5.41_b (1.42)	4.03_c (1.90)	109.74	<.001	.192
"It is clear that the protagonist is a person who has always had a rather positive attitude towards immigration"	4.35_a (1.30)	3.69_b (1.71)	5.25_c (1.49)	82.94	<.001	.152
N	309	309	309			

Note.- For each statement, participants were asked to indicate their level of agreement or disagreement using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). These questions were presented at the end of the questionnaire, after all relevant dependent variables had been completed. *M*(*SD*) represent the mean and the standard deviations, respectively. Means that do not share a letter are significantly different at $p < .05$ according to Duncan's post-hoc test.

Appendix 5

Psychological Insight Self-Report Scale (PI-SRS)

Items (*PI-SRS English*)	Items (*PI-SRS Spanish*)
- While watching the video, I experienced the sensation of having suddenly learned something new	- Durante el visionado del vídeo he experimentado la sensación de haber aprendido algo nuevo de manera repentina
- It could be said that, while watching the video, I concluded: now the pieces of the puzzle fit together	- Se podría decir que viendo el vídeo he llegado a la conclusión: ahora las piezas del puzle encajan
- While watching the video, I experienced a kind of revelation or inner enlightenment	- Viendo el vídeo he experimentado una especie de revelación o iluminación interior
- While watching the video, there was a moment in which I experienced a change of attitude	- Viendo el vídeo ha habido un momento en el que he experimentado un cambio de actitud
- The video has given me a new insight or perspective on the topic that was covered in the story	- El vídeo me ha dado una nueva visión o perspectiva sobre el tema que se trataba en la historia
- While watching the video, I had the impression of having suddenly understood something	- Viendo el vídeo he tenido la sensación de haber comprendido algo de repente, de manera súbita
- There was one or more moments when I thought “sure, that’s the way it is; now I understand”	- Ha habido uno o varios momentos en los que he pensado “claro, es así, ahora lo comprendo”
- The story told in the video sparked a “Eureka moment” for me—a kind of sudden discovery or the sense of having suddenly understood something	- La historia que narra el vídeo me ha generado un “momento eureka”, una especie de descubrimiento repentino o la sensación de haber comprendido algo de pronto
- Watching the video gave me the sense of having reached a breakthrough insight about the topic of the story	- Ver el vídeo me ha provocado la sensación de haber llegado a una conclusión innovadora sobre el tema que se trataba en la historia
- While watching the video, I experienced a moment of spontaneous clarity or understanding	- Viendo el vídeo he experimentado un momento de claridad o entendimiento espontáneo

Note.- Instruction to participants: “Think about the video you just watched. We would like to know to what extent you have experienced the following sensations while watching the video. To do this, please indicate your level of agreement or disagreement with the following statements.” Items were presented with 7-point Likert scales from 1 (*strongly disagree*) to 7 (*strongly agree*).