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Fiction increases trust in Democracy: Indirect effect of security institutions effectiveness' audiovisual representation in their perceived performance through just-world belief

Abstract

This study focuses on the impact of audiovisual fiction on trust in institutions, drawing on cultivation theory and narrative persuasion research. We test the effects of audiovisual representation of security institutions' effectiveness in fighting crime on perceived performance of security institutions, trust in democracy, political interest, and political optimism, mediated by just-world beliefs and narrative transportation. 130 students from Universidad de Salamanca (Spain) and Escuela Superior de Economía y Negocios (El Salvador) participated in the online experiment and were randomly assigned to two experimental conditions and exposed to one of two sequences from the series *La Casa de Papel* that differed in the degree of effectiveness (high versus low) with which security institutions acted to solve a criminal event. The results of the proposed parallel mediation model showed that there is a significant and positive indirect effect of this representation on trust in democracy only through the just-world belief. The main contribution of our study is the confirmation that cultivation and narrative persuasion work together to explain how audiovisual fiction shapes attitudes toward public institutions in two different countries. Finally, we found that further research is needed to test alternative models that include other variables to establish and better understand this psychological process.

Keywords
Cultivation theory, narrative persuasion, narrative transportation, just-world belief, democracy.

1. Introduction

Television became the dominant channel for media consumption, acting not only as a source of information and entertainment, but also as a socializing agent (Busselle & van den Bulck,

2019). Cultivation theory emerged to understand how people's beliefs about life and society are influenced by television consumption, and its central hypothesis is that a high level of consumption of stable and repetitive messages found in television programming would cultivate beliefs in alignment with those representations (Hermann *et al.*, 2021). Despite the changes that the messaging system has undergone in recent decades, from the popularization of videocassettes to access to the Internet, the underlying elements of cultivation have not changed (Morgan *et al.*, 2015). Thus, the relationship between this messaging system and viewers' conceptions of social reality has persisted over decades and is evidenced by a significant effect size, even when it is considered to be consistently small (Hermann *et al.*, 2021).

Although cultivation theory has been researched with a particular focus on overall television exposure (Hermann *et al.*, 2021), one of the most effective applications of its effects is through narrative persuasion, as an emotional process in which involvement with either the narrative or even the character reduces resistance and promotes acceptance of the ideas and beliefs of the narrative, and is explained by narrative transportation, identification, or other psychological mechanisms (Appel *et al.*, 2019; Clementson, 2020; Igartua, 2010; Igartua & Barrios, 2012; Walter *et al.*, 2021).

For the purposes of this study, we examine one of the earliest applications of cultivation theory and the effect of audiovisual representations of a violent society on audience perceptions and attitudes (Hermann *et al.*, 2021), from the perspective of public trust in the police, which has traditionally been linked to fear of crime (Choi *et al.*, 2019; Williams & Fedorowicz, 2019). As such, we use the concept of just-world beliefs, in which good deeds are rewarded and bad deeds are punished (Apple, 2008), in order to examine the relationship between audiovisual representations of society and related beliefs. Consequently, this study seeks to contribute to the understanding of how audiovisual fictional narratives affect security institutions' perceived performance and trust in democracy through the mediating role of just-world beliefs.

1.1. *Cultivating Just-World Beliefs and Trust in Democracy*

Cultivation theory posits that frequent media consumers' beliefs and perceptions of reality are influenced by their exposure to television reality and are more consistent with specific media images and messages than with their social reality (Busselle & van den Bulck, 2019; Choi *et al.*, 2019; Melhem & Punyanunt-Carter, 2019). This theory has been extensively studied for decades and has consistently shown a small but significant effect size (Hermann *et al.*, 2021). This effect has also been studied in other media forms, such as social media (Stein *et al.*, 2021) and video games (Busselle & van den Bulck, 2019), confirming that shared cultural perspectives are fostered and maintained through cumulative exposure to certain types of messages, with television messages being the most studied (Hermann *et al.*, 2021). This cumulative process occurs in the context of high frequency media exposure, regardless of whether the narrative stimuli are remembered or not (Shah *et al.*, 2020), as the factor that fosters and reinforces the associated beliefs is the repeated exposure to the media message system (Coyne *et al.*, 2019).

Such a message system has been studied by George Gerbner and many others in the light of cultivation theory (Morgan *et al.*, 2015), which proposes that there is a long-term relationship between exposure to it and beliefs about social reality (Hermann *et al.*, 2021). Cultivation theory suggests that repetitive, long-term, and constant exposure to patterns, which is common in most programming, cultivates widely shared and stable images of life and society in the minds of viewers (Gerbner, 1998). Thus, this message system can also be understood as a mechanism of social control, given that the values and ideas cultivated in it have historically corresponded to what elites have desired or needed (Shanahan & Morgan, 1999). As such, it becomes relevant to study the effects of exposure to this message system on beliefs related to the social organization and political structure that is legitimate from viewers' perspective.

Given the effect that cultivation has on individuals' perceptions and even their behaviors (Hermann *et al.*, 2021), it is key to understand how it affects the perceived performance of public institutions responsible for safety and social harmony, such as the police. This effect is particularly relevant now that social media has shed critical light on the role and relationship between the police and the community they serve (Williams & Fedorowicz, 2019), and the impact of exposure to police violence on health and mental health has been studied and validated (DeVylder *et al.*, 2020). This relationship is relevant because the police force is one of the public institutions that individuals have more visibility or interaction with, acting as the face of government (Stogner *et al.*, 2020), and there's evidence of a stable effect of trust in police on trust in government, strengthened by the perception of safety (Jeong & Han, 2020), also manifested on the works of Silva *et al.* (2020), whose findings include that poor performance of the police reduce the likelihood to have high trust in government, and we understand that this effect could be extended to the rest of government and the political system under which society is organized.

With autocratization on the rise and a setback to 1989 in terms of the level of democracy under which the average citizen of the world lives under (Boese *et al.*, 2022), we intend to study the implications of cultivation for democracy. Given that complex mass societies require shortcuts from participatory deliberative democracy, such as representation, division of labor, differentiated institutions, and trust relationships between citizens and governments (Lafont, 2019; Warren, 2020), trust is one factor that can be influenced by the message system. We now know how trust in government, but also interest in building the common good and the idea that this common good is achievable, affects political participation in a traditional democracy or an e-democracy (Lee & Schachter, 2019; Lindner & Aichholzer, 2020). Thus, it is important to examine how trust in security institutions, trust in the democratic system, political interest, and political optimism can be modified by changes in beliefs.

One of these beliefs is the idea that both good and bad people get what they deserve, or a belief in a just world as a *metastory* that applies to the vast majority of fictional content (Apple, 2008). This is relevant to this research because when individuals perceive the police as a fair or respectful institution, they are more likely to cooperate with the task of creating a safe environment for the community (Bolger & Walters, 2019), which implies a form of political participation. In this sense, the belief in a just world has two dimensions: deservingness for oneself, as an individual experience that allowed finding meaning in the difficulties they face, and for others, as a collective global circumstance that leads to the maintenance of the status quo (Galli & Modesto, 2023). In this sense, the idea of living in a just reality motivates individuals to be happier and better adjusted (Furnham, 2021) or to play by the rules of society.

Just-world belief studies are more recent than the works around Cultivation Theory, but they extend their results. For example, Apple (2008) validated a small but significant effect between television consumption and said belief, which is consistent with all the small but verified and significant effect of cultivation (Hermann *et al.*, 2021). Even more recently, just-world belief has been validated as a proven tool for legal socialization on youth, extending legitimacy to the law transmitted by non-legal authorities they already know (Thomas *et al.*, 2021). For this experimental study, we expected that greater agreement with this belief would lead citizens to hold more favorable attitudes toward their community's security institutions and the democracy in which they live in, reflected in more trust, political interest, and political optimism.

1.2. *Narrative persuasion and audiovisual fiction*

Cultivation theory begins with George Gerbner's (1998) approach that television distributes an organic and coherent message system to each household for several hours a day, in which stories and cultural environment are consumed in a non-selective ritual form (Hermann *et al.* 2021). These stories or narratives have been described as a sequential series of events that

occur in a dynamic world that is subject to change and has a plot, place, context, time, and characters (Clementson, 2020). It is an effective mechanism of persuasion because of its subtle messages, the social models it can present as characters, and its potential to transport the audience (Green & Brock, 2000; Igartua, 2007). We therefore turn to the field of narrative persuasion, which studies the power of narrative messages (fictional or based on real events, in different modalities, written, audio, audiovisual) to shape people's attitudes, beliefs, and behaviors (Green *et al.*, 2019; Green & Brock, 2000). In this context, the concept of mediating mechanisms and the processes of narrative transportation and identification with the character become particularly relevant.

A mediator variable M is the conduit through which an independent variable X transmits its effect on the dependent variable Y and explains this process or mechanism by accounting for their association (Igartua & Hayes, 2021; Preacher & Hayes, 2008). In this sense, when X exerts its effects on Y through an intervening variable M, we understand that X has an indirect effect on Y through M (Preacher & Hayes, 2008). In the process of narrative persuasion, mediators refer to psychological processes, and the most common explanatory mechanisms given by the main theoretical models in the field are identification with the character and narrative transportation (Igartua & Cachón-Ramón, 2023).

We understand identification as the emotional and cognitive empathy that allows the audience to give up their identity and adopt that of the fictional character and their perspective (Igartua & Vega Casanova, 2016). To persuade the audience, an important aspect is the character and how it can create identification through similarity or other resources (Ooms *et al.*, 2019). Individuals temporarily let go of their own point of view and instead experience events from the character's perspective (Moyer-Gusé *et al.*, 2019). On the other hand, narrative transportation is the fusion of attention, imagery, and emotion focused on the narrative of a story (Green & Donahue, 2008). For this study, the focus was on narrative transportation and the psychological process in which the individual experiences strong emotions and motivations related to the fictional series of events and loses access to their reality and its facts (Appel *et al.*, 2019). Narrative transportation was chosen because it reflects not only the effects produced by the characters, but also by the broader narrative in general.

Narrative persuasion has been studied in a variety of fields and applications, such as how organizations can use narratives to persuade the public in the event of a communication crisis (Clementson, 2020), improve attitudes towards corporations (Boukes & LaMarre, 2021), or affect a buyer-seller relationships between company decision makers and suppliers (Anazaa *et al.*, 2020); how workers can gain control and create self-directed behaviors through gamification (Seo *et al.*, 2021); how storytelling is a mechanism for disseminating environmental messages to larger audiences to change behaviors and connect people with nature (McCormack *et al.*, 2021); how narratives can be used to create positive intergroup attitudes (Murrar & Brauer, 2019) and reduce stigma (Hecht *et al.*, 2021; Zhuang & Guidry, 2022) or prejudice (Moyer-Gusé *et al.*, 2019), improve attitudes toward immigrants and even increase intentions to cooperate with organizations that support them (Igartua *et al.*, 2023; Igartua & Cachón-Ramón, 2023; Igartua & Guerrero-Martín, 2022; Igartua, Guerrero-Martín *et al.*, 2021); and even how they can be used to improve perspectives on health, either in HIV-AIDS prevention (Camelo-Guarín *et al.*, 2023) tobacco consumption (Igartua, Rodríguez-Contreras *et al.*, 2021), e-cigarette use (Liu & Yang, 2020) or human papillomavirus vaccination intention (Liu *et al.*, 2021).

All of these examples, drawn from a long tradition of research on cultivation (Hermann *et al.*, 2021) and narrative persuasion (Zhuang & Guidry, 2022), reinforce the idea of the power that narratives have to change audience beliefs (Apple, 2008), the power to create a temporary attitudinal change and if the individual has a strong interest in the issue, the attitudinal change can even last longer (Polletta & Redman, 2020). The relationship between Cultivation Theory and narrative persuasion has been validated in the sense that the long-term judgments are built upon the repeated activation of the short-term judgments (Dixon, 2020;

Shrum, 2009). This power has not only been tested and validated but has also been shown to be stronger than other forms of media (Liu & Yang, 2020; Murrar & Brauer, 2019). For this reason, we selected an audiovisual content, *La Casa de Papel* series, which presents a fictionalized situation involving the efforts of security institutions to solve a robbery, convenient for this experimental study.

2. Rationale and Hypotheses

The main objective of our experimental research was to study the cultivation theory by contrasting just world belief, as an idea of fairness in the real world promoted by television content (Apple, 2008); and narrative transportation, as one of the most common explanatory mechanisms of narrative persuasion, which represent how the audience is immersed in the narrative of a story focusing on its images and feelings (Green & Donahue, 2008). Thus, we contrast one construct related to the content and the other one related to the experience of watching television, both as alternative explanations of how the audiovisual representation of the effectiveness of security institutions affects their perceived performance, trust in democracy, political interest and political optimism, which from now on will become political attitudes.

Because the content-based and experience-based effects are different, they were tested with distinct strategies. To test just-world beliefs, we edited sequences from *La Casa de Papel*, one depicting an effective police performance in solving a robbery, which works under the ideas of just-world beliefs, and the other depicting an ineffective police performance, which goes against this belief. On the other hand, to test narrative transportation, we used the narrative transportation scale (Appel *et al.*, 2015). Subsequently, we measured the perceived performance of security institutions and trust in democracy with a selection of statements from the Latinobarómetro (2020) survey, which we coded on the constructs of political attitudes.

To this end, a two-group randomized design was used with two sequences of *La Casa de Papel*, one depicting a relatively effective performance of security institutions and another depicting a relatively ineffective performance of security institutions. Students from the Universidad de Salamanca (Spain) and the Escuela Superior de Economía y Negocios (El Salvador) participated in the experiment.

Qualtrics was used to present the videos, which were randomly distributed to the participants, who then completed the various measures after viewing the audiovisual stimuli. This resource made it possible to include participants from both countries, but the autonomy of the participants could be related to the limited results and will be discussed below.

To study the process of interaction between the variables, we proposed a parallel mediation model with two mediators working separately:

Figure 1. Parallel mediation model: Indirect effect of audiovisual representation of security institutions effectiveness on political attitudes (perceived performance of security institutions, trust in democracy, political interest and political optimism) alternatively through the just-world belief and narrative transportation.
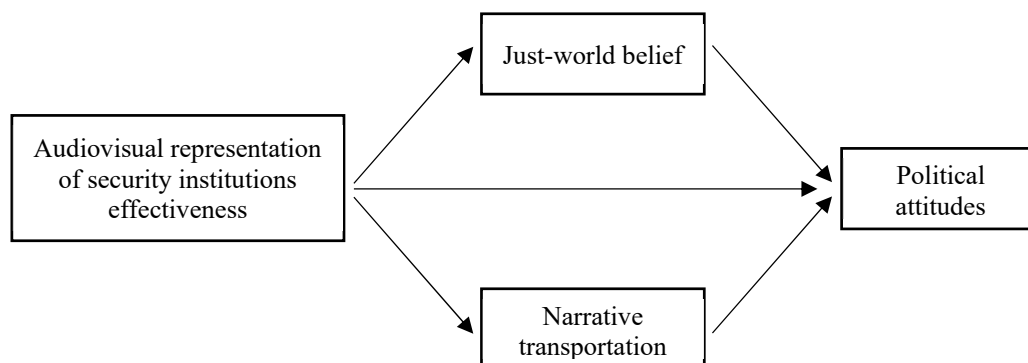
Source: Own elaboration.

This parallel mediation model represents the two hypotheses of this experimental study:

H1. Individuals exposed to the sequence depicting a police performance with high relative effectiveness (compared to individuals exposed to the sequence depicting relatively low police performance effectiveness) will exhibit higher levels of perceived security institution performance (H1a), trust in democracy (H1b), political interest (H1c), and political optimism (H1d), explained by an indirect effect through just-word beliefs.

This is the hypothesis related to the effects of cultivation trough ideas portrayed on television content, validating the notion that television consumption shapes viewers' perceptions.

H2. Individuals exposed to the sequence depicting a police performance with high relative effectiveness (compared to individuals exposed to the sequence depicting relatively low police performance effectiveness) will exhibit higher levels of perceived security institution performance (H1a), trust in democracy (H1b), political interest (H1c), and political optimism (H1d), explained by an indirect effect through narrative transportation.

This hypothesis proposes the influence of television through the feelings associated with the experience of television consumption and the reduction on resistance.

3. Method

3.1. *Participants*

The study included 130 students, 46.92% from the Universidad de Salamanca (Spain) and 53.07% from the Escuela Superior de Economía y Negocios (El Salvador), between the ages of 18 and 66, with a mean age of 25.8 (SD = 7.9); 51.5% were female and 46.9% were male, and 1.5% were non-binary participants. It was a convenience sampling, given the access of the researchers to both academic communities.

3.2. Design and procedure

An experimental study was conducted using a two randomized group design. Participants in each country followed the same procedure, which consisted of completing a three-block questionnaire designed with Qualtrics. The first block included informed consent, socio-demographic data (gender, age, country of residence, and highest level of education attained), and media consumption. Next, participants were exposed to a sequence of *La Casa de Papel*. At this point, participants were randomly assigned to two experimental conditions based on the sequence they had to watch, which differed in the degree of police effectiveness (low versus high) in solving a crime. After viewing, participants completed the post-test measures to assess the effectiveness of the experimental manipulation (manipulation check), narrative transportation, perceived performance of security institutions, and their trust in democracy. Using Qualtrics statistics, we discarded the observations of participants who did not complete the video playback and kept and analyzed only the observations of participants who experienced the full narrative stimuli.

3.3. *"La Casa de Papel"*

La Casa de Papel was chosen as the source for the experimental stimuli, with the assumption that its popularity and dynamic portrayal of a complex heist would generate interest in participants, increase participation, and encourage full viewing of the sequences. This is a Spanish series that gained popularity after being distributed by Netflix, who acquired the series and continued its production. Since it is one of the most watched series in Spanish on this platform (Netflix, 2022), it was expected that the research participants from both Spain and El Salvador would have consumed it and immersed themselves in its narrative. This aspect is important because, although the experiment is conducted with an edited sequence

from the first season, it is expected that the entire series will be the one that disseminates and perpetuates the message system. Since the first two seasons of the series deal with a robbery at the Fábrica Nacional de Moneda y Timbre and include a portrayal of the security authorities, its content is suitable for the objectives of this research.

Two different sequences from *La Casa de Papel* were used, showing a robbery, the police operation, and the subsequent actions of the criminals and the police. In the first (lasting 7 minutes and 38 seconds), the police and security forces showed a high level of efficiency in solving the criminal incident, by demonstrating control when negotiating with the leader of the robbers. In the second sequence (of 9 minutes and 24 seconds), the police were shown working with a low level of efficiency and experiencing difficulties in solving the criminal situation: the leader of the robbers gained an advantage over the police, and he explicitly recognized that they were in control of the situation to the detriment of the police. All scenes used are from the first season of *La Casa de Papel*.

3.4. *Instruments and variables*

Just-world belief. Applying the third research claim proposed by O'Keefe (2003), we used a message manipulation check that reflected belief as a mediating psychological state explaining the effect of the audiovisual representation of low security institution effectiveness on political attitudes. Participants had to indicate the degree of disagreement and agreement (from 1 to 7) with the statement "The sequence clearly shows that in the end the thieves are in control of the situation." This manipulation check was then inverted and recoded as a Just-world belief variable (M=3.04, SD=1.82).

Narrative transportation. It was measured using the 5-item scale developed by Appel *et al.* (2015). Participants had to indicate their level of disagreement and agreement (from 1 to 7) with each of the proposed statements about their experience while watching the audiovisual narrative. A narrative transportation index was created using the average of each participant (α = .75, M = 4.37, SD = 1.21).

Perceived performance of security institutions. An adapted version of the Fernández and Grijalva (2012) scale, based on the work of Tahoria (2002), was used, which included the 6 items used to measure this perception. An index for the evaluation of the performance of security institutions was obtained by calculating the average for each participant (α = .92, M = 2.56, SD = 0.96).

Trust in democracy. To assess this, we selected items from the annual survey conducted by Latinobarómetro (2020) and identified those used to assess confidence in democratic governance and its processes, measured from 1 to 7 (from strongly disagree to strongly agree). An index of trust in democracy was created by calculating the average for each participant (α = .60, M = 5.03, SD = 1.07).

Political interest. Three items from the Latinobarómetro (2020) were also taken (prior recoding of the last item) and an index was created by calculating the average for each participant (α = .29, M = 5.67, SD = .89), although it showed low reliability.

Political optimism. Two items were selected from the Latinobarómetro (2020) that showed a strong positive correlation (r(128) = .27, p < .001), and thus an index of political optimism was created by calculating the average for each participant (M = 4.78, SD = 1.24).

Control variables. Demographic factors are used as control mechanisms, with the advantage of working with two samples from two different societies whose consumption of audiovisual content has been homogenized by globalization, but whose national, political and security institutional realities are supposedly different. We used age (M = 25.87, SD = 7.9), country of residence (Spain = 46.9%, El Salvador = 53.1%), previous exposure to *La Casa de Papel* (Yes = 72.3%, No = 27.7%) and the number of seasons of *La Casa de Papel* previously watched.

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3.5. *Data analysis strategy*

To test the parallel mediation model, we used the PROCESS macro for SPSS (Hayes, 2022), applying Model 4. To assess the indirect effect, 95% percentile bootstrap confidence intervals (CIs) on the basis of 10,000 bootstrap samples were used, so that we considered the indirect effect to be statistically significant if the CI obtained (CI at 95%) did not include the value 0, so that the values would be either both positive or both negative (Igartua & Hayes, 2021).

4. Results

4.1. *Preliminary analysis*

The equivalence of the experimental groups was tested by means of Student's t and cross-table hypothesis tests. It was corroborated that there were no significant differences in age (t(128)= -0.08, p = .929), sex (χ2(2) = 1.67, p = .433), country of residence (χ2(1) = 0.00, p = . 928), educational level (χ2(2) = 3.85, p = .145), television consumption (t(128) = -0.87, p = .382), print media consumption (t(128) = -1.00, p = .317), digital media consumption (t(128) = -0.17, p = . 865), magazine consumption (t(128) = 0.81, p = .936), internet consumption (t(128) = -0.32, p = .742), in the audiovisual consumption index (t(128) = -0.16, p = . 871), in the number of seasons watched of *La Casa de Papel* (χ2(2) = 0.55, p = .968), nor in having previously watched the sequence presented as experimental stimulus (χ2(2) = 0.23, p = .631). On the other hand, statistically significant differences were found in radio consumption (t(128) = -2.13, p = .035). These results indicate that the two groups of participants were homogeneous in relevant variables before exposure to the experimental stimulus. The conformation of the experimental groups by country is presented in Table 1.

Table 1. Conformation of the experimental groups.

	Residents in Spain	Residents in El Salvador
Exposure to sequence depicting high police effectiveness in crime fighting	34	39
Exposure to sequence depicting low police effectiveness in fighting crime	27	30
N	61	69

Source: Own elaboration.

We also contrasted whether participants from both countries differed significantly in the outcome variables. It was observed that there were no significant differences in trust in democracy (t(128) = 0.66, p = .514) or political interest (t(128) = -0.47, p = .634). However, there were significant differences between participants in both countries in the evaluation of the performance of security institutions (El Salvador: M = 2.06, SD = 0.70; Spain: M = 3.12, SD = 0.90; t(113.18) = 7.44, p < .001), in trust in security institutions (El Salvador: M = 2.06, SD = 0.70; Spain: M = 3.12, SD = 0.90; t(113.18) = 7.44, p < . 001), and in political optimism (El Salvador: M = 5.10, SD = 1.20; Spain: M = 4.43, SD = 1.19; t(128) = −3.16, p = .002).

4.2. *Testing the efficacy of the experimental manipulation*

Participants' responses to two items were used to test the effectiveness of the experimental manipulation. With respect to the first item, "The police action to prevent the crime was effective," it was observed that there were no significant differences in the degree of agreement with this statement between participants randomly assigned to the high police effectiveness condition to solve the criminal incident (M = 3.60, SD = 1.55) and those assigned to the low effectiveness condition (M = 3.49, SD = 1.67) (t(128) = 0.39, p = .695). This behavior is explained by the fact that even though the videos show relative differences in police effectiveness, in general, the series *La Casa de Papel* (from which the sequences were extracted)

continues to show a general narrative in which the police are not effective. This general narrative is demonstrated by the marginally significant correlation that exists between this first manipulation check item and the question "Approximately how many seasons of *La Casa de Papel* have you seen?" ($r(130) = -.15$, $p = .075$). This shows that the greater the exposure to the content of the series, the higher the level of disagreement with the effectiveness of the police in preventing crime, and that greater exposure is that we understand by *cultivation effect*.

With regard to the second statement, "The sequence clearly shows that the robbers are in control of the situation in the end," statistically significant differences were observed in the level of agreement with this statement between participants who had been assigned to the high efficacy condition ($M = 3.86$, $SD = 1.65$) and those assigned to the low efficacy condition ($M = 6.35$, $SD = 0.75$) ($t(128) = -10.51$, $p < .001$), indicating that the videos do indeed show a difference in the effectiveness of the police in maintaining control over the robbers as the events of the series unfold. This affirmation confirms that the effectiveness of the experimental stimulus fulfills the objectives of its elaboration. At the same time, it allows it to be constituted as an evaluation of the participants' just-world belief (Appel, 2008), as previously mentioned.

4.3. *Parallel mediation model analysis*

For H1 and H2, we used model 4 of the PROCESS macro for SPSS (Hayes, 2022). In a parallel mediation analysis, linear regression equations are used to estimate the effects of the independent variable on the mediator variables, the effects of the mediator variables on each of the outcome variables, the direct effects, and the indirect effects (Igartua & Hayes, 2021).

It was found that the audiovisual representation of police effectiveness (high versus low) had a statistically significant effect on the perception that the message projected the idea of a just-world ($B = 2.46$, $SE = 0.24$, $p < .001$). Thus, people assigned to the high police effectiveness version were more likely than those assigned to the low effectiveness version to think that the sequence reinforced the idea of a just-world.

Perception of the just-world message had no significant effect on perceived performance of security institutions ($B = 0.04$, $SE = 0.05$, $p = .44$), political interest ($B = -0.01$, $SE = 0.06$, $p = .834$), and political optimism ($B = 0.03$, $SE = 0.07$, $p = .638$), but had a statistically significant positive effect on trust in democracy ($B = 0.15$, $SE = 0.06$, $p = .026$). Thus, greater agreement with the perception of a just-world message was associated with greater trust in democracy.

On the other hand, the audiovisual depiction of police effectiveness (high versus low) had no significant effect on narrative transportation ($B = -0.28$, $SE = 0.20$, $p = .170$), meaning that the depiction of high police effectiveness did not involve a more immersive experience for participants. Narrative transportation had no significant effect on trust in democracy ($B = 0.06$, $SE = 0.08$, $p = .406$), political interest ($B = 0.11$, $SE = 0.07$, $p = .117$), and political optimism ($B = 0.00$, $SE = 0.09$, $p = .963$), but it had a statistically significant positive effect on perceived performance of security institutions ($B = 0.14$, $SE = 0.06$, p = .018).

Figure 2. Parallel mediation model results: Indirect effects of audiovisual representation on trust in democracy through just-world belief and narrative transportation (unstandardized regression coefficients, with direct effect in parentheses) + p < .10, * p < .05, ** p < .01, *** p < .001.
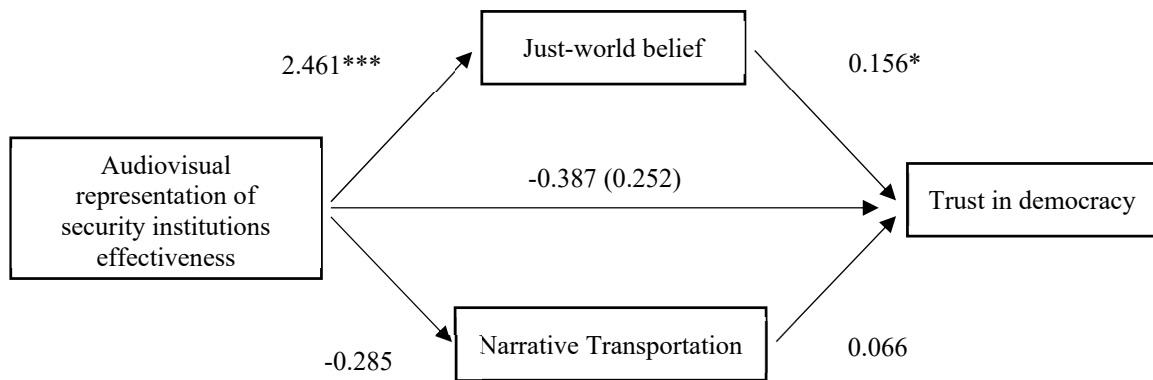
Source: Own elaboration.

Although we found both a statistically significant effect of the representation of security institutions on trust in democracy, only through just–world belief, and on the perceived per-formance of security institutions, only through narrative transportation, when we examine the indirect effects, only trust in democracy shows a significant indirect effect.

Given these results, we can only partially confirm Hypothesis 1, specifically H1b, which confirms that trust in democracy can be affected by fictional stories when a just–world belief is involved.

Table 2. Indirect effects of the representation of police effectiveness in the fight against crime on the evaluation of the performance of security institutions, trust in democracy, trust in own institutions, political interest, and political optimism through the perception of the message: just world. Mediational model with PROCESS (model 4).

Indirect effects (mediators)	Effect	Boot SE	Boot 95% CI
Representation → just-world belief → perceived performance	0.09	0.13	[-0.1698, 0.3721]
Representation → narrative transportation → perceived performance	-0.04	0.03	[-0.1334, 0.0176]
Representation → just-world belief → trust in democracy	**0.38**	**0.18**	**[0.0124, 0.7546]**
Representation → narrative transportation → trust in democracy	-0.01	0.03	[-0.1058, 0.0265]
Representation → just-world belief → Political interest	-0.03	0.14	[-0.294, 0.281]
Representation → narrative transportation → Political interest	-0.03	0.03	[-0.123, 0.018]
Representation → just-world belief → Political optimism	0.09	0.21	[-0.322, 0.510]
Representation → narrative transportation → Political optimism	-0.00	0.03	[-0.077, 0.054]

Note. The representation of police effectiveness in fighting crime (independent variable) was coded as a dummy variable (0 = low effectiveness, 1 = high effectiveness). For the statistical inference of the indirect effect, the bootstrapping procedure was used for 10,000 replacement samples to generate confidence intervals at 95% (percentile method). An indirect effect is statistically significant if the value 0 is not included in the established confidence interval (CI at 95%).

5. Discussion and conclusions

Even with these modest results, it is important to analyze the entire process considering cultivation theory and readings that reconcile the results with the theoretical framework. Issues of sampling design and procedure need to be addressed, as well as the experimental stimuli that may have influenced the results. Based on what the data reveals, the results do not deny the existence of cultivation; on the contrary, the existence of some significant effects is evidence of how participants' perceptions are altered by the audiovisual content to which they were exposed to.

Therefore, the challenge is to carry out other types of research in order to validate the way in which the cultivation process is evolving with the change in the consumption of audiovisual content as a result of the Internet and mobile devices popularization. On the other hand, there is a need to examine alternative configurations of variables, which opens the possibility of incorporating other models, such as the inspirational media model (Oliver *et al.*, 2021), to identify other variables and alternative processes that help explain these phenomena.

However, the rejection of hypothesis 2 for most of the dependent variables calls for reflection on the various choices made in the conceptual approach and the process of this research. Given that we only present a theoretical framework for the interaction between representation of the performance of security institutions with their perceived performance and with trust in democracy, we need to build a more robust conceptual framework for the rest of the dependent variables and find better instruments to account for the process of these dependent variables.

In terms of the experiment, in the future, it will also be necessary to incorporate some practices to improve the conditions of participation. This could include controlling external stimuli and reducing distractions, or testing the narrative in a field setting, one of the desirable features of empirical studies suggested by Murrar and Brauer (2019). There has been some discussion as to whether remote participation and the likelihood of participants being exposed to the stimuli on small screens could affect the effects, and although this has not been confirmed (Appel & Mengelkamp, 2022), it should be considered as one of the factors that could affect the study's findings. In the choice of group or individual viewing, it has been confirmed that isolated exposure increases narrative transportation and narrative persuasion (van Laera *et al.*, 2019), so this should be considered when developing guidelines and suggestions for participation to improve the experience.

The positive and significant relationship between the audiovisual portrayal of the effectiveness of security institutions and trust in democracy through just-world belief explains how the fictional portrayal of public institutions feeds the belief that good actions are rewarded, and bad actions are punished in the real world, which is related to greater trust in the concept of democracy. Although these results do not say anything about perceptions of the police, which was not an objective of the study, they do confirm the proposal that individuals with perceptions of a just reality would seek to maintain the status quo (Galli & Modesto, 2023), which would be a democratic one, or that they are better adapted to the democratic rules under which society operates (Furnham, 2021).

Future research is needed to determine whether this trust in democracy is associated with higher levels of political participation, not only at the level of elections, but also at the level of political parties and citizen oversight processes.

Given the social, technological, and content consumption transformations that global society is undergoing, it will be necessary to continue to study cultivation theory and narrative persuasion to understand how changes in audience habits, access to content, and its distribution through "personalized" algorithms affect consumers' perceptions of reality. In this sense, globalization raises the question of whether there is a single global message system or whether there are differences between the message systems of each country. One of the goals of this

research has been to shed light in one direction, and the validation of the mediation of just-world beliefs in the interaction between representation and perceived performance of the effectiveness of security institutions makes it relevant to continue studying these global phenomena. Thus, further research in this area is needed, in terms of evaluating alternative models, to identify other variables that can explain this psychological process that affects the public's perception of their institutions and their democratic attitudes.

References

Anazaa N. A., Kempb, E., Briggsc, E. & Bordersd, A. L. (2020). Tell me a story: The role of narrative transportation and the C-suite in B2B advertising. *Industrial Marketing Management*, *89*, 605-618. https://www.doi.org/10.1016/j.indmarman.2019.02.002

Appel, M. (2008). Fictional narratives cultivate just-world beliefs. *Journal of Communication*, *58*(1), 62-83. https://www.doi.org/10.1111/j.1460-2466.2007.00374.x

Appel, M., Gnambs, T., Richter, T. & Green, M. C. (2015). The transportation scale-short form (TS-SF). *Media Psychology*, *18*(2), 243-266.
https://www.doi.org/10.1080/15213269.2014.987400

Appel, M. & Mengelkamp, C. (2022). Watching videos on a smartphone: do small screens impair narrative transportation? *Media Psychology*, *25*(5), 653-674.
https://www.doi.org/10.1080/15213269.2021.2025109

Appel, M., Schreiner, C., Haffmans, M. & Richter, T. (2019). The mediating role of event-congruent emotions in narrative persuasion. *Poetics*, *77*.
https://www.doi.org/10.1016/j.poetic.2019.101385

Boese, V., Lundstedt, M., Morrison, K., Sato, Y. & Lindberg, S. I. (2022). State of the world 2021: autocratization changing its nature? *Democratization*, *29*(6), 983-1013.
https://www.doi.org/10.1080/13510347.2022.2069751

Bolger, P. C. & Walters, G. D. (2019). The relationship between police procedural justice, police legitimacy, and people's willingness to cooperate with law enforcement: a meta-analysis. *Journal of Criminal Justice*, *60*, 93-99. https://www.doi.org/10.1016/j.jcrimjus.2019.01.001

Boukes, M. & LaMarre, H. L. (2021). Narrative persuasion by corporate CSR messages: The impact of narrative richness on attitudes and behavioral intentions via character identification, transportation, and message credibility. *Public Relations Review*, *47*, 102107.
https://www.doi.org/10.1016/j.pubrev.2021.102107

Busselle, R. &Van den Bulck, J. (2019). Cultivation theory, media, stories, processes, and reality. In M. B. Oliver, A. A. Raney & J. Bryant (Eds.), *Media Effects: Advances in Theory and Research* (4th Ed.) (pp. 69-82). New York: Routledge.
https://www.doi.org/10.4324/9780429491146

Camelo-Guarín, A., Igartua, J. J., Vega-Casanova, J. & Palacio-Sañudo, J. E. (2023). Efectos de la modalidad de presentación de un mensaje de educación-entretenimiento de prevención del VIH. *Revista Latinoamericana de Psicología*, *55*, 73-82.

Choi, J., Yim, H. & Hicks R. D. (2019). Direct and indirect effects of crime-related media consumption on public confidence in the police. *International Journal of Police Science & Management*, *22*(1). https://www.doi.org/10.1177/1461355719880572

Clementson, D. (2020). Narrative persuasion, identification, attitudes, and trustworthiness in crisis communication. *Public Relations Review, 46*(2).
https://www.doi.org/10.1016/j.pubrev.2020.101889

Corporación Latinobarómetro. (2021). *Latinobarómetro 2021: Adiós Macondo*. Retrieved from https://www.latinobarometro.org/latContents.jsp

Coyne, S. M., Ward, L. M., Kroff, S. L. Davis, E. J., Holmgren, H. G., Jensen, A. C., Erickson, S. E. & Essig, L. W. (2019). Contributions of mainstream sexual media exposure to sexual attitudes, perceived peer norms, and sexual behavior: A meta-analysis. *Journal of Adolescent Health*, *64*(4), 430-436. https://www.doi.org/10.1016/j.jadohealth.2018.11.016

Dixon, T. L. (2020). Media stereotypes. Content, effects, and theory. In M. B. Oliver, A. A. Raney & J. Braynt (Eds.), *Media effects. Advances in theory and research* (pp. 243-257). New York: Routledge.

DeVylder, J., Fedina, L. & Link, B. (2020) Impact of police violence on mental health: a theoretical framework. *American Journal of Public Health*, *110*(11) 1704-1710. https://www.doi.org/10.2105/AJPH.2020.305874

Fernández, E. & Grijalva, A. (2012). Diseño y validación de dos escalas para medir el miedo al delito y la confianza en la policía. *Revista Española de Investigación Criminológica*, *10*.

Furnham, A. (2021). Just world beliefs, personal success and beliefs in conspiracy theories. *Current Psychology*. https://www.doi.org/10.1007/s12144-021-01576-z

Galli, L. M. & Modesto, J. G. (2023). Polarization about human rights: political orientation, morality, and belief in a just world. *Trends in Psychology*. https://www.doi.org/10.1007/s43076-023-00260-4

Gauthier, J. F. & Graziano, L. M. (2018). News media consumption and attitudes about police: in search of theoretical orientation and advancement. *Journal of Crime and Justice*, *41*(5), 504-520. https://www.doi.org/10.1080/0735648x.2018.1472625

Gerbner, G. (1998). Cultivation analysis: an overview. *Mass Communication and Society*, *1*(3/4), 175-194.

Good, J. (2007). Shop 'til we drop? Television, materialism and attitudes about the natural environment. *Mass Communication and Society*, *10*(3), 365-383. https://www.doi.org/10.1080/15205430701407165

Green, M., Bilandzic, H., Fitzgerald, K. & Paravati, E. (2019). Narrative effects. In M. B. Oliver, A. A. Raney & J. Braynt (Eds.), *Media effects. Advances in theory and research* (pp. 130-145). New York: Routledge.

Green, M. C. & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, *79*, 701-721. https://www.doi.org/10.1037/0022-3514.79.5.701

Green, M. C. & Donahue, J. (2008). *The handbook of imagination and mental simulation*. New York, NY: Psychology Press.

Hayes, A. (2022). *Introduction to mediation, moderation, and conditional process analysis: a regression-based approach*. New York, NY: The Guilford Press.

Hecht, M., Kloß, A. & Bartsch, A. (2021). Stopping the stigma. How empathy and reflectiveness can help reduce mental health stigma. *Media Psychology*, *25*(3). https://www.doi.org/10.1080/15213269.2021.1963991

Hermann, E., Morgan, M. & Shanahan, J. (2021). Television, continuity, and change: a meta-analysis of five decades of cultivation research. *Journal of Communication*, *71*(4), 515-544. https://www.doi.org/10.1093/joc/jqab014

Igartua, J. J. (2007). *Persuasión narrativa. El papel de la identificación con los personajes a través de las culturas*. San Juan (Alicante): Club Universitario.

Igartua, J. J. (2010). Identification with characters and narrative persuasion through fictional feature films. *Communications. The European Journal of Communication Research*, *35*(4), 347-373.

Igartua, J. J. & Barrios, I. M. (2012). Changing real-world beliefs with controversial movies. Processes and mechanisms of narrative persuasion. *Journal of Communication*, *62*(3), 514-531.

Igartua, J. J. & Cachón-Ramón, D. (2023). Personal narratives for improving attitudes towards stigmatized immigrants: a parallel-serial mediation model. *Group Processes & Intergroup Relations*, *26*(1), 96-119. https://www.doi.org/10.1177/13684302211052511

Igartua, J. J., González-Vázquez, A. & Arcila-Calderón, C. (2023). The effect of similarity to a transitional role model of an entertainment-education narrative designed to improve

attitudes toward immigrants: evidence from three European countries. *Media Psychology*. https://www.doi.org/10.1080/15213269.2023.2235574

Igartua, J. J. & Guerrero-Martin, I. (2022). Personal migrant stories as persuasive devices: effects of audience-character similarity and narrative voice. *Journal of Social and Political Psychology*, *10*(1), 21-34. https://www.doi.org/10.5964/jspp.8237

Igartua, J.J., Guerrero-Martín, I., Cachón-Ramón. D. & Wojcieszak, M. (2021). Mejor te cuento mi historia: vacunas narrativas para reducir el prejuicio hacia inmigrantes. In A. M. Bañón & J. Solves (Eds.), *Discurso lingüístico y migraciones* (pp. 179-206). Madrid: Arco/Libros.

Igartua, J. J. & Hayes, A. F. (2021). Mediation, moderation, and conditional process analysis: concepts, computations, and some common confusions. *Spanish Journal of Psychology*, *24*, e49.

Igartua, J.J., Rodríguez-Contreras, L., Marcos-Ramos, M., González-de-Garay, B. & Frutos, F. J. (2021). Prevención del tabaquismo con mensajes narrativos. Estudio experimental sobre el efecto conjunto de la similitud con el protagonista y la voz narrativa. *Adicciones*, *33*(3), 245-262.

Igartua, J. J. & Vega-Casanova, J. (2016) Identification with characters, elaboration, and counterarguing in entertainment-education interventions through audiovisual fiction, *Journal of Health Communication*, *21*(3), 293-300. https://www.doi.org/10.1080/10810730.2015.1064494

Jeong, J. & Han, S. (2020). Trust in police as an influencing factor on trust in government: 2SLS analysis using perception of safety. *Policing: An International Journal*, *43*(4), 541-558. https://www.doi.org/10.1108/PIJPSM-11-2019-0172

Lafont, C. (2019). *Democracy without shortcuts: A participatory conception of deliberative democracy.* Oxford: Oxford University Press. https://www.doi.org/10.1093/oso/9780198848189.001.0001

Lee, Y. & Schachter, H. L. (2019) Exploring the relationship between trust in government and citizen participation. *International Journal of Public Administration*, *42*(5), 405-416. https://www.doi.org/10.1080/01900692.2018.1465956

Lindner, R. & Aichholzer, G. (2020). E-democracy: conceptual foundations and recent trends. In L. Hennen, I. van Keulen, I. Korthagen, G. Aichholzer, R. Lindner & R. Nielsen, *European E-Democracy in Practice* (pp. 11-45). Cham: Springer Open. https://www.doi.org/10.1007/978-3-030-27184-8

Liu, S. & Yang, J. Z. (2020) Incorporating message framing into narrative persuasion to curb E-cigarette use among college students. *Risk Analysis*, *40*(8). https://www.doi.org/10.1111/risa.13502

Liu, S., Yang, J. Z. & Chu H. (2021) When we increase fear, do we dampen hope? Using narrative persuasion to promote human papillomavirus vaccination in China. *Journal of Health Psychology*, *26*(11), 1999-2009. https://www.doi.org/10.1177/1359105319894626

McCormack, C. M., Martin, J. K. & Williams, K. J. H. (2021). The full story: understanding how films affect environmental change through the lens of narrative persuasion. *People and Nature*, *3*, 1193-1204. https://www.doi.org/10.1002/pan3.10259

Melhem, S. & Punyanunt-Carter, N. M. (2019). Using cultivation theory to understand American college students' perceptions of Arabs in the media. *Journal of Muslim Minority Affairs*, *39*(2), 259-271. https://www.doi.org/10.1080/13602004.2019.1625258

Morgan, M., Shanahan, J. & Signorielli, N. (2015). Yesterday's new cultivation, tomorrow. *Mass Communication & Society*, *18*(5), 674-699. https://www.doi.org/10.1080/15205436.2015.1072725

Moyer-Gusé, E., Dale, K. & Ortiz, M. (2019). Reducing prejudice through narratives. *Journal of Media Psychology*, *31*(4), 185-195. https://www.doi.org/10.1027/1864-1105/a000249

Murrar, S. & Brauer, M. (2019). Overcoming resistance to change: using narratives to create more positive intergroup attitudes. *Current Directions in Psychological Science*, *28*(2), 164-169. https://www.doi.org/10.1177/0963721418818552

Netflix. (2022, March 20). Global top 10. *Netflix top 10*. Retrieved April 15, 2022, from https://top10.netflix.com/tv-non-english?week=2022-03-20

O'keefe, D. J. (2003). Message properties, mediating states, and manipulation checks: claims, evidence, and data analysis in experimental persuasive message effects research. *Communication Theory*, *13*(3), 251-274.

Oliver, M. B., Raney, A. A., Bartsch, A., Janicke-Bowles, S., Appel, M. & Dale, K. (2021). Model of inspiring media. *Journal of Media Psychology*, *33*(4), 191-201. https://www.doi.org/10.1027/1864-1105/a000305

Ooms, J., Hoeks, J. & Jansen, C. (2019). "Hey, that could be me": the role of similarity in narrative persuasion. *PLoS ONE*, *14*(4). https://www.doi.org/10.1371/journal.pone.0215359

Polletta, F. & Redman, N., (2020). When do stories change our minds? narrative persuasion about social problems. *Sociology Compass*, *14*(4), e12778 . https://www.doi.org/10.1111/soc4.12778

Preacher, K. J. & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879-891. https://www.doi.org/10.3758/BRM.40.3.879

Seo, K., Fels, S., Kang, M., Jung, C. & Ryu, H. (2021). Goldilocks conditions for workplace gamification: how narrative persuasion helps manufacturing workers create self-directed behaviors. *Human-Computer Interaction*, *36*(5), 473-510. https://www.doi.org/10.1080/07370024.2020.1744145

Shah, Z., Chu, J., Ghani, U., Qaisar, S. & Hassan, Z. (2020). Media and altruistic behaviors: the mediating role of fear of victimization in cultivation theory perspective. *International Journal of Disaster Risk Reduction*, *42*, 101336. https://www.doi.org/10.1016/j.ijdrr.2019.101336

Shanahan, J. & Morgan, M. (1999). *Television and its viewers: cultivation theory and research*. Cambridge: Cambridge University Press.

Shrum, L. J. (2009). Media consumption and perceptions of social reality: Effects and underlying processes. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd Ed., pp. 50-73). New York, NY: Routledge.

Silva, A., Esparza, D., Martinez-Ebers, V. & Branton, R. (2020). Perceived police performance, racial experiences, and trust in local government. *Politics, Groups, and Identities*. https://www.doi.org/10.1080/21565503.2020.1824122

Stein, J.-P., Krause, E. & Ohler, P. (2021). Every (Insta)gram counts? applying cultivation theory to explore the effects of Instagram on young users' body image. *Psychology of Popular Media, 10*(1), 87-97. https://www.doi.org/10.1037/ppm0000268

Stogner, J., Miller, B. L. & McLean, K. (2020). Police stress, mental health, and resiliency during the COVID-19 Pandemic. *American Journal of Criminal Justice*, *45*, 718-730. https://www.doi.org/10.1007/s12103-020-09548-y

Toharia, J.J. (2002). Las encuestas de opinión y las decisiones políticas: el caso de la evaluación y reforma de la justicia. *Revista Española de Investigaciones Sociológicas*, *99*, 223-236.

Thomas, K., Theodoro, R. & Komatsu, A. V. (2021). Socializing justice: the interface of just world beliefs and legal socialization. *Journal of Social Issues*, *77*(2), 314-335. https://www.doi.org/10.1111/josi.12442

Van Laera, T., Feiereisenb. S. & Viscontic, L. M. (2019). Storytelling in the digital era: a meta-analysis of relevant moderators of the narrative transportation effect. *Journal of Business Research*, *96*, 135-146. https://www.doi.org/10.1016/j.jbusres.2018.10.053

Walter, N., Bilandzic, H., Schwarz, N. & Brooks, J. J. (2021). Metacognitive approach to narrative persuasion: the desirable and undesirable consequences of narrative disfluency. *Media Psychology*, *24*(5), 713-739. https://www.doi.org/10.1080/15213269.2020.1789477

Warren, M. E. (2020). Participatory deliberative democracy in complex mass societies. *Journal of Deliberative Democracy*, *16*(2), 81-88. https://www.doi.org/10.16997/jdd.395

Williams, C. & Fedorowicz, J. (2019). Does social media promote the public's perception of the police: Survey results on trust cultivation. *Proceedings of the 52nd Hawaii International Conference on System Sciences*. Hawaii. Retrieved from https://hdl.handle.net/10125/59747

Zhuang, J. & Guidry, A. (2022): Does storytelling reduce stigma? A meta-analytic view of narrative persuasion on stigma reduction, *Basic and Applied Social Psychology*. https://www.doi.org/10.1080/01973533.2022.2039657