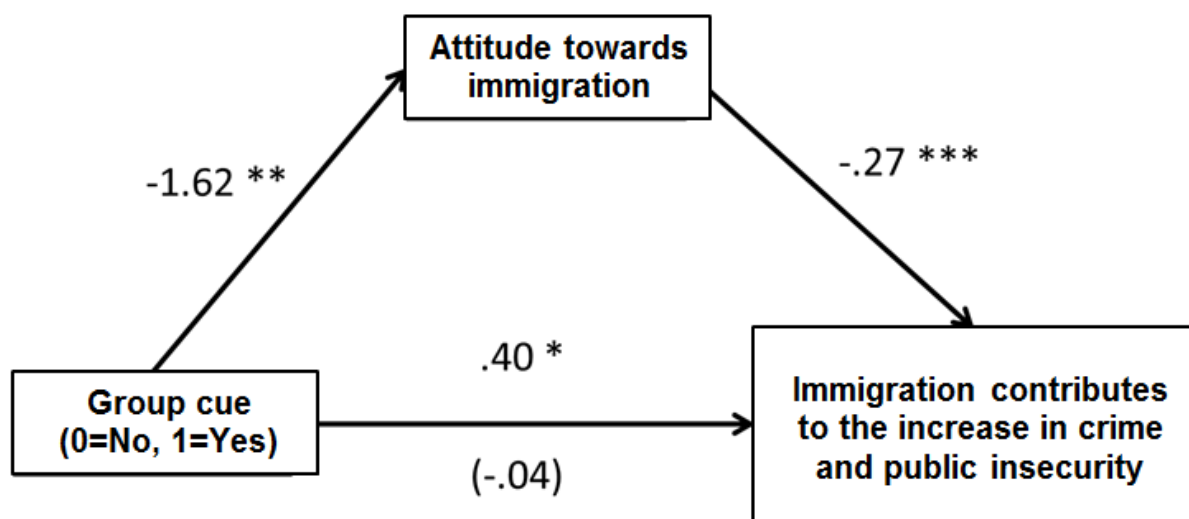


Figure 3. Mediation analyses (low involvement, n = 119, study 1): attitude towards immigration as mediating variable in the relation between the reference to the nationality of the protagonists of the news story and the negative stereotypical beliefs on immigration



Group cue → Attitude towards immigration → Immigration contributes to the increase in crime

$$B_{\text{indirect effect}} = .44, SE = .19, 95\% CI [.18, .74]$$

Note. The previous figure shows the non-standardised regression coefficients, B . The coefficient of the *direct effect* is shown in parentheses. * $p < .05$, ** $p < .01$, *** $p < .001$.

The mediational analysis applied between the *low involvement* participants revealed that attitudes towards immigration mediated the relation between the presence of information about the nationality of the protagonists of the news story and a greater agreement with the negative stereotypical belief "immigration contributes to the increase in crime and public insecurity", since the indirect effect (calculated by using 10,000 bootstrap samples) was statistically significant ($B_{\text{indirect effect}} = .44, SE = .14, 95\% CI [.18, .74]$)^[6]. Thus, the mentioning that the criminals were immigrants induced a more negative attitude towards immigration ($B = -1.62, p < .001$) and this, in turn, was associated with a greater agreement with the idea that "immigration contributes to the increase in crime and public insecurity" ($B = -.27, p < .001$) (see Figure 3). However, the mediational analysis among *high involvement* participants revealed that attitudes towards immigration do not mediate the relation between the presence of information about the nationality of the protagonists of the news story and greater agreement with the negative stereotypical belief "immigration contributes to the increase in crime and public insecurity", since the indirect effect was not statistically significant ($B_{\text{indirect effect}} = .03, SE = .09, 95\% CI [-.15, .22]$). Thus, hypothesis 4 did receive empirical support.

2.3. Conclusions

The results of study 1 corroborated three of the four hypotheses. It corroborated that the presence of information about the nationality of the criminals had a significant effect on the negative attitudes and emotions towards immigrants specifically when the involvement with the topic of the news story

was low. The results also corroborated that the process or mechanism of influence of the reference to the nationality of the criminals in the activation of stereotypical beliefs was mediated by attitudes towards immigration, but only among participants with low involvement. However, this does not mean that people with high involvement are not susceptible to this type of peripheral information. As hypothesised, in this case the process of influence is very likely to be related to cognitive mediation, i.e., due to the activation of trains of thought. This hypothesis was confirmed in the second study.

3. Study 2

Study 1 presented an important limitation: there were no differences in the interest nor in the emotional impact of the story among people exposed to a news story that alluded to an incident occurred in his own city (Valladolid, high involvement) in comparison to people who read a news story that chronicled the same event but located in another far city (Barcelona, low involvement). A second limitation is that it did not collect information about reactions to the news story (cognitive responses), since only self-report methods were employed. Therefore, a second experiment was designed in order to address the aforementioned problems. The main objective of the second study was to test a mediational model that included the cognitive responses raised by the reading of the news story as mediating variables.

3.1. Method

Study 2 consisted of an experimental research which involved 276 students from the University of Salamanca. The average age of participants was 19 years (DT = 2.49; 17-46 years) and 56.2% of them were women.

As in study 1, this study used a 2 x 2 between-subjects design, based on two experimental manipulations of a news story (group cue and involvement). We used the same news story used in study 1 (only 4.7% of the participants stated that they had already read the news story before), with the necessary modifications. Two conditions were created for the manipulation of *involvement with the subject of the news story*: low (the criminal event takes place in Oviedo) or high (the criminal event takes place in Salamanca, the city of the participants). The dependent variables were evaluated using a split-ballot questionnaire. The experiments took place in several classrooms of the University of Salamanca. In each classroom, participants were randomized to the four experimental groups. After the experimental news story was read, participants had to answer the questionnaire including the dependent, manipulation-check, and control variables:

Cognitive responses. These were evaluated with the "thought-listing technique" (Igartua and Cheng, 2009; Valkenburg, Semetko and de Vreese, 1999). Participants were asked: "write all thoughts, ideas or reflexions you had while reading the news story, i.e. those ideas that came to your mind during the reading of the news story". Four people^[7] with training in content analysis conducted the coding process. The first part of the analysis focused on counting the total number of cognitive response and the total number of words written by each respondent. Then, the following criteria were evaluated taking the ideas written down as units of analysis: a) Do they make any reference to the nationality of the criminals, with expressions such as foreign or immigrant (or similar), or do they make a comment about immigration and foreigners in general? (1 = yes, 0 = no); b) Do they show empathy, sympathy, pity, or identification with the victims of the criminal act? (1 = yes, 0 = no); c) Do they manifest a reaction of indignation, contempt, anger, rage or disgust for the situation reported in the news story, or towards the criminals? (1 = yes, 0 = no); d) Do they demand punitive measures (such as more

severe prison sentences) or police measures (more surveillance or police effectiveness) to deal with the type of events narrated in the news story? (1 = yes, 0 = no); e) Do they allude to the lack of public security, or the feeling of insecurity or fear in society? (1 = yes, 0 = no); f) Do they use insults or negative expressions such as "inhuman nature", "in cold blood", "brutality", "harshness", "cowardice", "evil", "cruelty", "shameless", or other terms that allude to the character or personality of the criminals of the news story? (1 = yes, 0 = no); g) Do they make a direct connection between immigration and crime or insecurity? For example, when we say that immigrants are criminals or that with the increase of immigration there are more crimes or insecurity? (1 = yes, 0 = no).

To assess the reliability of the encoding, 46 questionnaires were randomly chosen (16.66% of the sample, 137 cognitive responses) and independently examined by two analysts based on the previous criteria. Reliability was calculated with Krippendorff's coefficient Alpha (using KALPHA macro for SPSS; Hayes and Krippendorff, 2007). The results of the reliability are: number of written cognitive responses ($\alpha_k = .95$), number of written words ($\alpha_k = .99$), reference to the nationality of criminals ($\alpha_k = 1.0$), expressions of empathy ($\alpha_k = .82$), expressions of revulsion ($\alpha_k = .65$), demands for punitive or police measures ($\alpha_k = .83$), alluding to the lack of security ($\alpha_k = .58$), references to the character or personality of criminals ($\alpha_k = .54$) and allusions to the existence of a relation between immigration and insecurity ($\alpha_k = .82$). The mean of the written cognitive responses was 3.41 ideas per person ($DT = 1.46$) and the mean of written words was 41.64 words per person ($DT = 27.30$). An aggregated data file was created with the information from the encoding of cognitive responses (taking as aggregation variable the number of questionnaire), so that the final database (which also contained information about the rest of the variables) indicated the number and percentage of cognitive responses that focused on each of the aspects identified for each participant.

Emotions felt during the reading of the news story. Participants had to indicate the extent to what (from 1 "nothing" to 5 "a lot") reading of the news story had made them feel the ten different emotions (see study 1).

Evaluation of the news story. We used a semantic differential comprised of 9 bipolar 7-point scales with antonyms in their extremes: "clear-confuse", "easy to reading-difficult to read", etc. (see study 1).

Interest aroused by the news story. Participants were asked to "assesses the degree of interest aroused by the news story" (from 0 "no interest" to 10 "great interest").

Beliefs about the consequences of immigration. Participants were asked to indicate their degree of agreement or disagreement towards 8 claims about the consequences of immigration in Spain (see items in study 1). Principal components factor analysis (varimax rotation) extracted two factors (61.81% of the variance). The first factor referred to the belief that "immigration is a necessary contribution to the country" ($\alpha = .73$); while the second factor referred to the belief that "immigration contributes to the increase in crime and public insecurity" ($\alpha = .86$).

Political self-positioning. Participants were asked to answer to the following question: "in political issues the expressions left and right are normally used. What number of the following scale would represent best your political position? (from 1 left to 10 right)"; $M = 5.23$, $DT = 2.38$).

Media consumption. Participants were asked to answer to the following four questions: How many hours do you watch TV in a normal weekday? Do you listen to the radio? Do you read the general information press? Do you surf the Internet? A "general media consumption" indicator was created from the simple sum of the four considered variables ($M = 396.96$ minutes a day, $DT = 280.01$).

News consumption. Participants were asked to answer to the following four question: "to what extent (from 1 "nothing" to 5 "a lot") do you usually follow the news through the following media?" (Radio, television, print media and Internet). An indicator of "news media consumption" was created from the simple sum of the four considered variables ($M=12.44$, $DT=2.40$).

Interest in the subject of immigration. Participants were asked to answer to the following question: To what extent are you interested in the subject of immigration? (from 1 "nothing" to 5 "a lot"; $M=3.60$, $DT=0.75$).

Participation in discussions on the subject of immigration. Participants were asked to answer to the following four question: Have you ever actively participated, by giving your opinion, in conversations or discussions on the subject of immigration? (from 1 'never' to 5 "many times"; $M=2.94$, $DT=1.14$).

Level of contact with immigrants. Participants were asked whether they have or had had maintained (1=yes, 0=no) some kind of family, friendship, work, school or neighbourhood relation with immigrants. An index of personal contact with immigrants was created from the simple sum of the five dichotomous variables ($M=2.32$, $DT=1.25$).

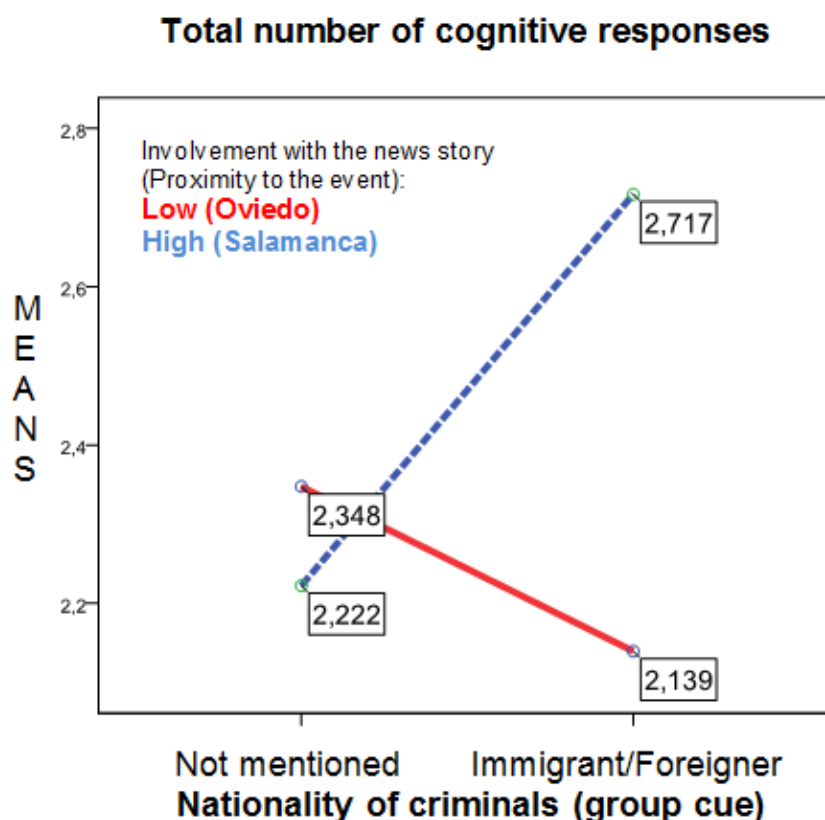
Experience with crime. Participants were asked to answer to the following questions: "Have you ever, in the course of your life, been the victim of a robbery in which there was no physical assault?" (1=yes, 0=no; 36.2% were affirmative answers) and "Have you ever been the victim of a robbery involving physical violence?" (1=yes, 0=no; 4.0% were affirmative answers). An index of personal experience with crime was created from the sum of the values of these variables ($M=0.39$, $DT=0.52$).

3.2. Results

First, we carried out a one-way factor analysis of variance (ANOVA) that included the experimental *condition* (made up of four groups) as the independent variable and the nine indicators of the evaluation of the news story as the dependent variables. The results showed that there were no statistically significant differences between the four versions of the experimental news story in any of the evaluation variables of the news story (in all analyses $p > .296$). These results indicate that the four experimental versions of the news story, despite containing two types of manipulation, did not generate differences in terms of their general assessment and therefore behaved as homogeneous stimuli. No significant differences were neither observed between the four experimental groups according to sex, age, interest in the subject of immigration, participation in conversations about the issue of immigration, level of contact with immigrants, experience with crime, media consumption and news consumption (in all analyses $p > .330$). Therefore, it can be concluded that the procedure of randomisation of participants to the conditions was successful and led to the formation of four homogeneous groups in relevant variables.

In the indicator of interest aroused by the news story, there were no statistically significant differences between the participants who read the news story located in Salamanca ($M=6.73$, $DT=1.85$) and those who read the news story located in Oviedo ($M=6.55$, $DT=1.90$) ($t(274) = -0.81$, $p = .419$). With regards to the emotional impact of the news story, there was only one statistically significant difference with respect to the emotion of surprise ($t(270) = -2.66$, $p < .008$). Participants who read the news story located in Salamanca ($M=2.66$, $DT=1.05$) showed greater surprise than participants who read the same news but located in Oviedo ($M=2.33$, $DT=0.98$). Based on these findings, it can be concluded that the manipulation of involvement with the news story did not produce the expected effect in terms of interest and emotions, which suggests that the procedure used to manipulate the involvement with the news story is not entirely appropriate.

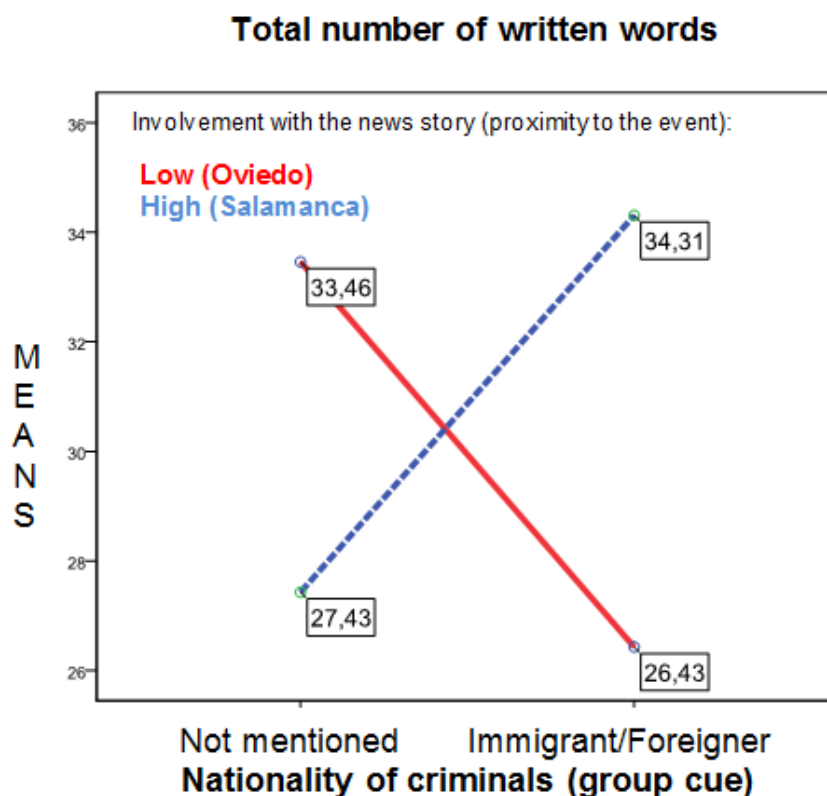
Figure 4. Effect of the reference to the nationality of criminals and effect of the involvement with the subject of the news story on the total number of written CR



In order to test hypothesis 5 we carried out nine analyses of covariance (ANCOVA) for a 2 x 2 between-subjects factor design, including as covariates such variables as sex, age, political self-positioning, interest in the subject of immigration, in conversations about the issue of immigration, level of contact with immigrants, experience with crime, media consumption and news consumption. With the inclusion of covariates we obtained information about the impact of the independent variables, controlling for the influence of other relevant variables, which increases the statistical power of the analysis (Hayes, 2005). The dependent variables considered were the different indicators created from the cognitive responses (CR; see *methods*).

We obtained a marginally significant interaction effect in the "total number of CR" ($F(1, 189) = 2.94, p < .088, \eta_p^2 = .015$). There were no differences between participants with high and low involvement when the nationality of the criminals was not mentioned. On the other hand, among the students who read the news story mentioning that criminals were immigrants there were clear differences depending on their involvement: participants with high involvement wrote more cognitive responses (see Figure 4). A similar result was obtained with respect to the "total number of written words" by participants (Figure 5). In this case, the marginally significant interaction effect ($F(1, 189) = 3.40, p < .067, \eta_p^2 = .018$) showed that participants with high and low involvement reacted very differently depending on whether the nationality of the criminals was included or not in the news story.

Figure 5. Effect of the reference to the nationality of criminals and effect of the involvement with the subject of the news story on the total number of written words



In the variable "percentage of CR which allude to the nationality of the criminals", there was a significant interaction effect between the two independent variables ($F(1, 160)=4.02, p<.042, \eta_p^2=.026$), being people with high involvement, in comparison to the people with low involvement, the most affected by the news story that mentioned the nationality of the criminals (Figure 6). Similarly, there was a statistically significant interaction effect in the comments written by participants that linked immigration with the increase in insecurity ($F(1, 160)=7.07, p<.009, \eta_p^2=.042$): face with a news story mentioning the nationality of the criminals, it was people with high involvement who wrote more cognitive responses that associated immigration with public insecurity (Figure 7).

Figure 6. Effect of the reference to the nationality of criminals and effect of the involvement with the subject of the news story on the percentage of CR alluding to the nationality of criminals

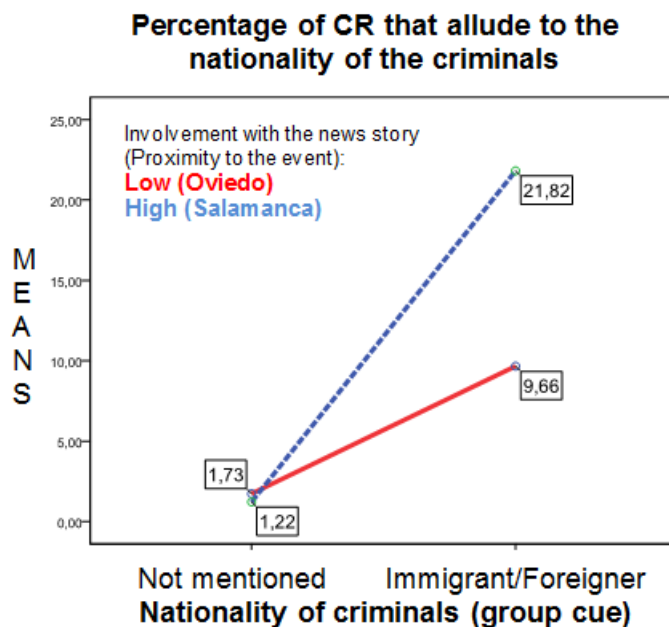
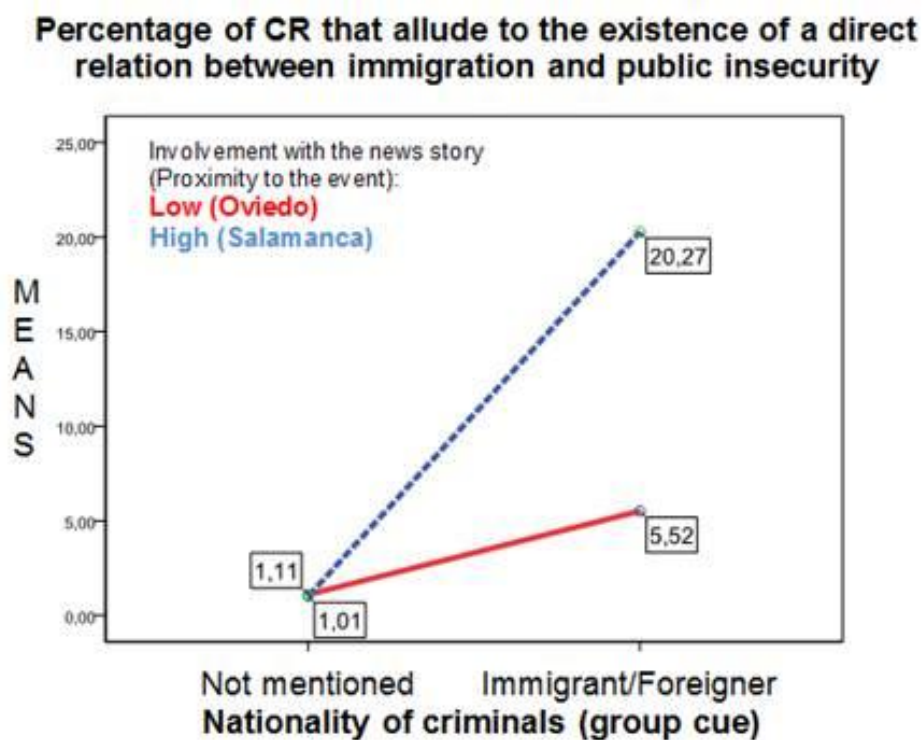
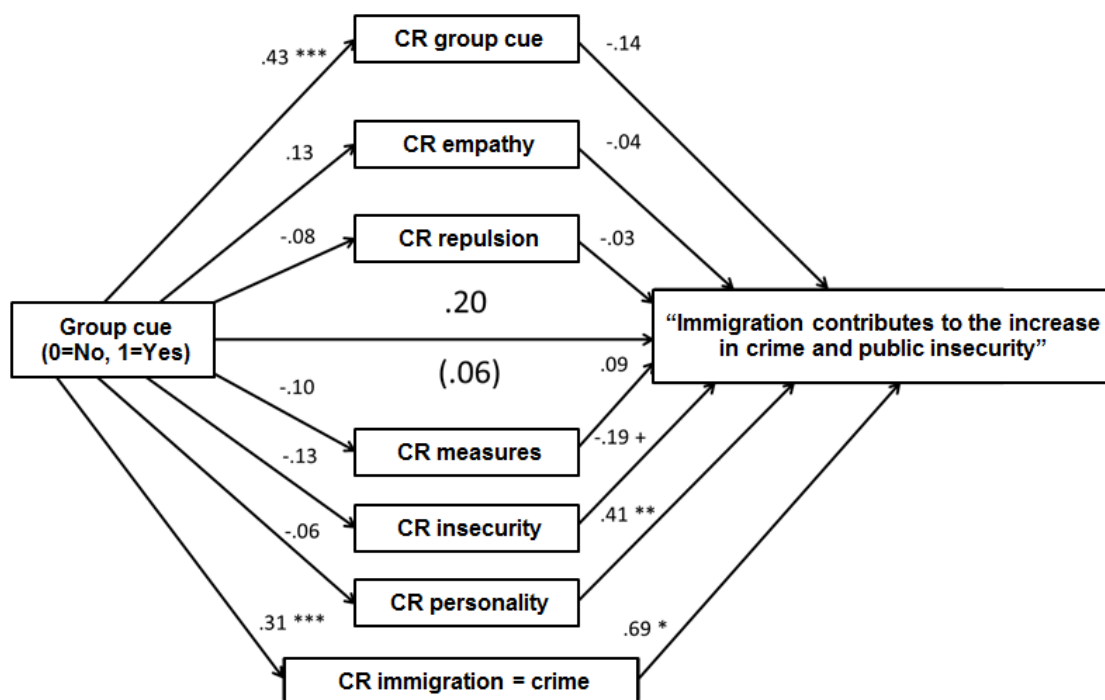


Figure 7. Effect of the reference to the nationality of criminals and effect of the involvement with the subject of the news story on the percentage of CR with allusions to the existence of a relationship between immigration and insecurity



To test hypothesis 6 we used the macro PROCESS for SPSS (model 4) created by Hayes (2013), which tested a mediational model with multiple mediating variables (Preacher and Hayes, 2008), since the seven indicators of cognitive responses obtained from the thought-listing technique (all except the number of CR and the number of written words) were introduced as such variables, being the independent variable the inclusion or not of the reference to the criminals' nationality (independent variable, encoded as dummy variable, being 1=the news story mentions the criminals are immigrants, 0=the news story does not mention the criminals' nationality), and the dependent variable the degree of agreement with the negative and stereotypical belief that "immigration contributes to the increase in crime and public insecurity". The mediational model was computed separately for the participants with high and low involvement (calculated with 10,000 bootstrap samples), and expected cognitive variables to only have a significant mediating effect on participants with high involvement.

Figure 8. Mediational analysis (high involvement, n = 116, study 2): cognitive responses raised by the reading of the news story as mediating variables in the relation between the reference to the nationality of the criminals of the news story and the negative stereotypical beliefs about immigration



Group cue -> CR about immigration = crime -> Immigration contributes to the increase in crime

$B_{indirect\ effect} = .21, SE = .11, 95\% CI [.02, .47]$

Note. The previous figure shows the non-standardised regression coefficients, *B*. The coefficient of the *direct effect* is shown in parentheses. + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

The mediational analysis applied to the *low involvement* participants revealed that none of the seven variables related to the cognitive impact of the news story acted as a mediating variable and,

therefore, that there were no statistically significant indirect effects. On the other hand, the mediational analysis applied to participants with *high involvement* revealed a statistically significant indirect effect through the mediating variable "CR on the existence of a relationship between immigration and the increase in public insecurity" ($B_{indirect\ effect} = .21, SE = .11, 95\% CI [.02, .47]$; Figure 8). Thus, the inclusion of the nationality of criminals in the news story induced a large number of cognitive answers alluding to the relationship between immigration and insecurity ($B = .31, p < .001$), which was associated in turn with a greater agreement with the stereotypical belief that "immigration contributes to the increase in crime and public insecurity" ($B = .69, p < .042$).

3.3. Conclusions

The results obtained in the second study constitute a substantial support to the hypotheses formulated. Consistent with hypothesis 5, involvement with the news story increased participants' cognitive production (the degree of reflection and the number of written words) especially when it mentioned that the criminals were immigrants. In addition, in the case of the news story mentioning the nationality of the criminals, it was people with high involvement who largely wrote cognitive responses that linked immigration and insecurity. The results of the mediational model are also consistent with hypothesis 6. They confirmed that the cognitive responses (in particular, the cognitive responses alluding to a relationship between immigration and public insecurity) explained the effect of the reference to the nationality of the criminals in the activation of the stereotypes about immigrants, but only when the involvement with the topic of the news story was high.

4. Conclusions and general discussion

The main objective of the two experimental studies was to identify the mechanisms or processes that explain the socio-cognitive impact caused by the news story's dominant framing of immigration (which links immigration with crime and the increase in insecurity). Both studies were designed based on the findings of framing effects research, the cognitive processing of persuasive communications and the role of the (textual or visual) cues on the race or nationality of the protagonists of the news story in the activation of stereotypes (e.g., Brader et al., 2008; Igartua and Cheng, 2009; Igartua, Moral and Fernández, 2011; Peffley, Shields and Williams, 2001).

Using a news story about a criminal and very violent act, in which the information on the nationality of the criminals (group cue) and the place where the event took place (involvement) were manipulated, we confirmed that participants showed a more negative attitude towards immigration and experienced more negative emotions towards immigrants when they read the news story that labelled criminals as immigrants and had a low involvement, which confirmed hypotheses 1 and 3. However, this same effect of interaction did not take place in relation to the impact on the negative stereotypical beliefs ("immigration contributes to the increase in crime and public insecurity"), so hypothesis 2 did not receive empirical support. However, there was an indirect effect in these beliefs, since participants with low involvement showed a greater degree of agreement with the stereotypical beliefs when the news story mentioned the immigrant status of the criminals and this effect was mediated by attitudes towards immigration. Therefore, mentioning the nationality of the criminals had an indirect effect on the activation of the stereotypes but only when the news story had aroused little interest (low involvement) among participants, which corroborated hypothesis 4.

In study 2 we collected and analysed the cognitive responses produced by the reading of the news story through the "thought-listing technique". The results indicate that participants with high and low involvement reacted very differently depending on whether the nationality of the criminals was

mentioned or not. Thus, involvement with the subject of the news story increased the cognitive production of participants but only when the news story mentioned that the criminals were immigrants. In addition, there was cognitive channelling and more critical cognitive responses towards immigration among the participants with high involvement with the news story that defined the criminals as immigrants or foreigners, which confirmed hypothesis 5. Hypothesis 6 was also corroborated since the critical or negative cognitive responses that alluded to the existence of a relationship between immigration and public insecurity explained the effect of the reference to the nationality of the criminals on the activation of stereotypes about immigrants, but only when the involvement with the subject of the news story was high.

The results are convergent with the theoretical proposal and with a *dual model for news framing effects*. It was confirmed that the peripheral cues included in a news story (e.g. a news story about a criminal act mentioning that the criminals are immigrants or foreigners, *group cue*) had significant socio-cognitive effects on the cognitive responses, attitudes and beliefs and emotions experienced by the reader. However, the mechanism that explains these effects is different depending on the level of readers' involvement with the narrated event. When the event occurs outside the context of the reader (low involvement) the influence of the peripheral cues occurs because the group cue included in the news story activates a kind of mental shortcut, an quick judgement of the object that has been highlighted in the news story (in this case, the fact that the criminals of the story are immigrants or foreigners), which produces a process of *attitudinal modelling*. In other words, the peripheral cue activates a certain attitude and this in turn influences the activation, formation or reinforcement of a certain belief or opinion. This mechanism is not triggered among people with high involvement with the subject of the news story, which does not mean that they are not affected by the peripheral cues. Thus, when people read a news story about an event that has taken place in their own local context (high involvement), the peripheral cues influence the processes of reflection and activate a type of *biased cognitive processing*, which leads to a process of *cognitive channelling*: the cognitive answers written by readers have the same tone of the information that appears in the news story, which will in turn determine its impact on opinions or beliefs.

This theoretical proposal on the news framing effects mechanisms has been tested in a specific context: the treatment of immigration in the media. In order to verify its validity in a more general context, future research should focus on other issues. In addition, future research should take into consideration the effect of other peripheral cues in the construction of the news framing, beyond the reference to the nationality of the protagonists of the story. On the other hand, new research studies should be carried out to examine the long-term effects in conditions of high and low involvement since, according to the Elaboration Likelihood Model, the attitudes formed or changed through the central route show greater temporal persistence, greater behaviour prediction power and greater resistance to counterarguments than the attitudes formed or changed through the peripheral route (Petty and Cacioppo, 1986). Although these predictions have been proven in the field of persuasion there is no empirical evidence to date about whether these processes also operate in relation to news framing effects.

The two experimental studies had satisfactory levels of quality (randomisation of participants to the treatments, homogeneous stimuli, adequate internal consistency of the scales), but they also had a series of limitations that should be acknowledged. First, the procedure to manipulate the involvement did not work properly. Anyways, the peripheral *group cue* did exercise a significant indirect effect in the activation of the stereotypical and negative beliefs about immigration through the mediation of attitudes (low involvement) and cognitive responses (high involvement). A second limitation is that both studies involved college students, i.e. a very homogeneous group in terms of their attitudes

towards immigrants. It would be advisable to replicate this type of research with the general population. Thirdly, another possible limitation refers to the type of dependent variables used (the self-administered scales and the “thought-listing technique” task). Relevant effects could have been more easily found through the use of implicit measures of attitudes (Briñol, Petty and McCaslin, 2009; Dovidio, Kawakami, Smoak and Gaertner, 2009).

- This article is part of the [research project funded](#) by the Research Projects Support Programme of the Education Council of the Government of Castile and León: *Análisis y efectos socio-cognitivos de los encuadres noticiosos de la inmigración en la prensa regional de Castilla y León* ("Analysis and socio-cognitive effects of the news framing of immigration in the regional press in Castile and León"), [reference nº SA040A06](#).

5. List of references

- Baron, R. M. and Kenny, D. A. (1986): The moderator--mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Brader, T., Valentino, N. A. and Suhay, E. (2008): What triggers public opposition to immigration? Anxiety, group cues, and immigration threat. *American Journal of Political Science*, 52(4), 959-978.
- Briñol, P., Petty, R. E. and McCaslin, M. J. (2009): Changing attitudes on implicit versus explicit measures: what is the difference? In R. E. Petty, R. H. Fazio, and P. Briñol (Eds.), *Attitudes: Insights from the new implicit measures* (pp. 429–458). Nueva York, NY: Psychology Press.
- Cea D’Ancona, M. A. (2004): *La activación de la xenofobia en España*. Madrid: CIS-Siglo XXI.
- De Vreese, C. H. (2003): *Framing Europe. Television news and European integration*. Amsterdam: Aksant.
- Dovidio, J. F., Kawakami, K., Smoak, N. and Gaertner, S. L. (2009): The nature of contemporary racial prejudice: insights from implicit and explicit measures of attitudes. In R. E. Petty, R. H. Fazio, and P. Briñol (Eds.), *Attitudes: Insights from the new implicit measures* (pp. 429–458). Nueva York, NY: Psychology Press.
- Entman, R. (1993): Framing: toward a clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51-58.
- Gilliam, F. D., Iyengar, S., Simon, A. and Wright, O. (1996): Crime in black and white. The violent, scary world of local news. *Press/Politics*, 1(3), 6–23.
- Gross, K. and Brewer, P. R. (2007): Sore losers: news frames, policy debates, and emotions. *Harvard International Journal of Press/Politics*, 12(1), 122-133.
- Gross, K. and D’Ambrosio, L. (2004): Framing emotional response. *Political Psychology*, 25 (1), 1-29.
- Hayes, A. F. (2005): *Statistical methods for communication science*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Hayes, A. F. (2009): Beyond Baron and Kenny: statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.

- Hayes, A. F. (2013): *Introduction to mediation, moderation and conditional process analysis. A regression-based approach*. Nueva York, NY: The Guilford Press.
- Hayes, A. F. and Krippendorff, K. (2007): Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures*, 1(1), 77-89.
- Igartua, J. J. and Cheng, L. (2009): Moderating effect of group cue while processing news on immigration. Is framing effect a heuristic process? *Journal of Communication*, 59(4), 726-749.
- Igartua, J. J., Cheng, L. and Lopes, O. (2003): To think or not to think: two pathways towards persuasion by short films on Aids prevention. *Journal of Health Communication*, 8(6), 513-528.
- Igartua, J. J., Moral, F. and Fernández, I. (2011): Cognitive, attitudinal and emotional effects of the news frame and group cues on processing news about immigration. *Journal of Media Psychology*, 23(4), 174-185.
- Iyengar, S. (1991): *Is anyone responsible? How television frames political issues*. Chicago: The University of Chicago Press.
- Johnson, B. T. and Eagly, A. H. (1990): Involvement and persuasion: types, traditions and the evidence. *Psychological Bulletin*, 107(3), 375-384.
- Machill, M., Köhler, S. and Waldhauser, M. (2007): The use of narrative structures in television news. An experiment in innovative forms of journalistic presentation. *European Journal of Communication*, 22(2), 185-205.
- Matthes, J. (2007): Beyond accessibility? Toward an on-line and memory-based model of framing effects. *Communications: The European Journal of Communication Research*, 32 (1), 51-78.
- McCombs, M. E., Lopez-Escobar, E. and Llamas, J. P. (2000): Setting the agenda of attributes in the 1996 Spanish general election. *Journal of Communication*, 50(2), 77-92.
- McCombs, M. E. and Reynolds, A. (2002): News influence on our pictures of the world. In J. Bryant and D. Zillmann (Eds.), *Media effects. Advances in theory and research* (pp. 1-18). Mahwah, NJ: Lawrence Erlbaum Associates.
- Navas, M., García, M. C., Rojas, A. J., Pumares, P. and Cuadrado, I. (2006): Actitudes de aculturación y prejuicio: la perspectiva de autóctonos e inmigrantes. *Psicothema*, 18 (2), 187-193.
- Peffley, M., Shields, T. and Williams, B. (2001): The intersection of race and crime in television news stories: an experimental study. *Political Communication*, 13(3), 309-327.
- Perse, E. M. (2001): *Media effects and society*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Petty, R. E. and Cacioppo, J. T. (1986): *Communication and persuasion. Central and peripheral routes to attitude change*. Nueva York: Springer-Verlag.
- Petty, R. E., Priester, J. R. and Wegener, D. T. (1994): Cognitive processes in attitude change. In R. S. Wyer and T. K. Srull (Eds.), *Handbook of social cognition. Volume 2: applications* (pp. 69-141). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Preacher, K. J. and Hayes, A. F. (2008): Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.

Price, V. and Tewksbury, D. (1997): News values and public opinion: A theoretical account of media priming and framing. In G. Barnett and F. J. Foster (Eds.), *Progress in communication sciences* (pp. 173-212). Greenwich, CT: Ablex.

Price, V., Tewksbury, D. and Powers, E. (1997): Switching trains of thought. The impact of news frames on reader's cognitive responses. *Communication Research*, 24(5), 481-506.

Scheufele, D. (1999): Framing as a theory of media effects. *Journal of Communication*, 49(1), 103-122.

Scheufele, D. (2000): Agenda-setting, priming and framing revisited: another look at cognitive effects of political communication. *Mass Communication and Society*, 3(2-3), 297-316.

Sendín, J. C. and Izquierdo, P. (2008): *Guía práctica para los profesionales de los medios de comunicación: tratamiento mediático de la inmigración*. Madrid: OBERAXE, Ministerio de Trabajo y Asuntos Sociales.

Tankard, J. W. (2001): The empirical approach to the study of media framing. In S. D. Reese, O. H. Gandy and A. E. Grant (Eds.), *Framing public life* (pp. 95-106). Mahwah, NJ: Lawrence Erlbaum Associates.

Valkenburg, P. M., Semetko, H. A. and de Vreese, C. H. (1999): The effects of news frames on readers' thoughts and recall. *Communication Research*, 26(5), 550-569.

Von Sikorski, C. and Schierl, T. (2012): Effects of news frames on recipients' information processing in disability sports communications. *Journal of Media Psychology*, 24(3), 113-123.

6. Notes

[1] See "Recomendaciones del CAC sobre el tratamiento informativo de la inmigración" ("Recommendations of the Audiovisual Council of Catalonia on the news treatment of immigration") http://www.cac.cat/pfw_files/cma/recerca/quaderns_cac/Q12recomanacions_ES.pdf

[2] Media effects research is increasingly more focused on the analysis of the mediating processes and mechanisms. The works of Baron and Kenny (1986) and, most recently, Hayes (2009) have given researchers methodological tools to contrast the mediational processes and to gain deeper and more advanced insights into the causal evidence of the media effects (Hayes, 2013). Research on framing effects has been influenced by this strand of mediational analyses. In this context, the objective is not only to determine whether a particular news approach or frame influences the cognitive, attitudinal and emotional processes, but also to explain the responsible mechanism, i.e. to determine why a certain influence occurs depending on how a news story is built.

[3] The field work was carried out with the collaboration of José Antonio Otero, Professor of the University of Salamanca and member of its Observatory of Audiovisual Content.

[4] The online version of the news story is available at: http://elpais.com/diario/2006/06/18/espana/1150581613_850215.html.

[5] The new "condition" variable (made up of four groups) was created from the combination of the levels of the two independent variables.

[6] According to the bootstrapping method, an indirect effect is statistically significant if the established confidence interval (CI at 95%) does not include the zero value. If the zero value is

included in said confidence interval, the null hypothesis that proposes that the indirect effect equals 0, i.e. that there is no association between the involved variables, cannot be rejected (Hayes, 2013).

[7] The coders were: Elena Palacios, Salvador Alvidrez, Socorro Palitó and Tania Acosta.

HOW TO CITE THIS ARTICLE IN BIBLIOGRAHIES / REFERENCES:

JJ Igartua (2013): “Attitudinal impact and cognitive channeling of immigration stereotypes through the news”, at *Revista Latina de Comunicación Social*, 68, pages 599 to 621.

Article received on 22 July 2013. Submitted to pre-review on 24 July. Sent to reviewers on 26 July. Accepted on 19 September 2013. Galley proofs made available to the author on 1 October 2013. Approved by author on: 3 October 2013. Published on 4 October 2013.
