



# Spies and security: Assessing the impact of animated videos on intelligence services in school children

Espías y seguridad: Evaluación del impacto de vídeos animados sobre los servicios de inteligencia en escolares

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## ABSTRACT

Making the work of security organizations known to school children is a means of mitigating feelings of insecurity provoked by the diffusion of information on terrorist attacks in communications media and through social media. Whilst there is a longer tradition of projects to educate school children on the police and the armed forces, no comparable projects have been found on the intelligence services. With the objective of filling this gap, the authors designed and produced two animated educational videos for Spanish school children on the Spanish intelligence service: The National Intelligence Center (CNI). In this paper, the impact of the videos is measured in relation to the knowledge, the stereotypes, and the attitudes of school children towards the CNI. To do so, two questionnaires were administered to 1,092 school children aged 8 and 12, before and after viewing the videos. The results of the questionnaire prior to screening the videos showed that the school children held no knowledge of the intelligence services, and expressed highly developed stereotypes, and moderately negative attitudes towards them. Student-t tests for related samples were used to confirm the responses, on the basis of which it was found that the videos modified both knowledge and stereotyping, as well as attitudes towards the CNI. Specifically, following the screenings the knowledge of the school children improved, stereotyping diminished, and positive attitudes increased.

## RESUMEN

Dar a conocer a los escolares las organizaciones de seguridad es un medio para reducir la inseguridad generada por la difusión de los atentados terroristas en los medios de comunicación y redes sociales. Mientras que hay una mayor tradición en proyectos para educar a los escolares sobre la policía y los militares, no se han encontrado proyectos análogos sobre los servicios de inteligencia. Con el objetivo de suplir esta carencia, los autores diseñaron y produjeron dos vídeos animados educativos destinados a escolares españoles sobre el servicio de inteligencia español, el Centro Nacional de Inteligencia (CNI). Este artículo mide cuál es el impacto de los vídeos en el conocimiento, los estereotipos y las actitudes de los escolares hacia el CNI. Para ello, se aplicaron dos cuestionarios a 1.092 escolares de 8 a 16 años, antes y después de la visualización de los vídeos. Los resultados previos a la visualización mostraron un conocimiento nulo, alto grado de estereotipos y actitudes moderadamente negativas hacia los servicios de inteligencia. Se comprobaron las respuestas mediante pruebas T para muestras relacionadas, a partir de las cuales se obtuvo que los vídeos modificaban el conocimiento, los estereotipos y las actitudes hacia el CNI. Específicamente, tras la visualización mejoró el conocimiento de los escolares, disminuyó el grado de estereotipos y aumentaron las actitudes positivas.

## KEYWORDS | PALABRAS CLAVE

Attitudes, school, Spain, stereotypes, childhood, security, intelligence service, video.  
Actitudes, escuela, España, estereotipos, infancia, seguridad, servicio de inteligencia, vídeo.



## 1. Introduction

All children and young adolescents with whom we speak will have been born after the 2001 terrorist attacks against the United States. Terrorism has unleashed attacks against the cities in which people of that age live ever since they have been able to reason. If in the 1930s, children feared wild beasts and thunder storms, successive generations would live in fear of nuclear warfare, and today fear is awoken in children by the thought of tsunamis and hurricanes and terrorism (Garbarino & al., 2015). Teachers would benefit from the background information that is needed to explain the context of terrorist attacks and the existence of a State organization that attempts to counter terrorism. As stated by Jaramillo (2005), teachers should be able to choose from among the different tools available for their educational needs.

Verbal information and vicarious learning are known to have a role in prompting anxiety in young children and causing them to succumb to fear (Field & Lawson, 2003), to which the role of television in developing children's perceptions of personal vulnerability may be added (Romer & al., 2003). In fact, the change from fear of 'thunder' to fear of 'terrorism' is, without doubt, due to the notorious relation that exists between consumption of the communications media and the perception of threats and vulnerability that, although present in most individuals, is of particular concern among children. Although younger children are in general more exposed and affected by the news than older children and adults, catastrophic news such as the attacks on New York, Madrid, London, Paris, and Barcelona can have an intense impact at all ages. One study completed with children from schools in the city of New York brought to light a wide range of mental health problems (Hoven & al., 2002), which included agoraphobia (15%), anxiety due to separation (12%), and disorder due to post-traumatic stress (11%) as consequences of the attacks. The children who reported greater exposure to the news showed higher ratios of Post-Traumatic Stress Disorder (PTSD) than those children with less exposure to television. The impact of terrorism on young children through their exposure to the communications media and social media was observed in thirteen studies that Pfefferbaum (2018) compiled on the matter.

Children learn through observation and imitation, so the role of their intermediaries, such as parents and school teachers, in controlling which messages are communicated and how those messages are conveyed is a fundamental one (Comer & Kendall, 2007; Punch, 2002). Parents may do little more than recreating the stereotypes associated with James Bond films and the novels of John Le Carré to which the children may have previously been exposed through the media, while school is a territory where spies<sup>1</sup> are not found (Quintelier, 2015). However, while the information voids are easy to define, it is more complex to confront the stereotypes; the set of –positive or negative– beliefs that one group of people hold in the form of cognitive schemes that influence the way they process social information (McGarty & al., 2002). This view fits in with the proposal of van Deth & al. (2011), which is used in this investigation, that distinguishes between 'Political Awareness' (awareness of institutions) and 'Functional Knowledge' (what they do) when gathering information in the field.

The central objective of the educational system is from very early ages to transmit commonly shared values such as human rights and the freedoms that characterize democratic societies (Starkey, 2012). As reflected in Gardner (1991), perceptions of the police and the world of law enforcement among children represent a struggle between the goodies and the baddies. If we follow DiSessa (1982: 465), who sustained that appropriate opinions on the police need to be established during the first years of infancy, it would also follow that the existence of the intelligence services as an institution working to prevent terrorist attacks and in hot pursuit of the perpetrators should be communicated to the younger citizens of a democracy.

The constant appearance of 'secret' agencies in the television news combating terrorism in the city, terrorist alerts, simulated evacuations, telephone surveillance... does nothing to improve the situation. The studies by Klein & al. (2009), DeVoe & al. (2011) and Carpenter & al. (2012) on the reactions of young children following terrorist attacks showed that children who were informed by their carers expressed less anxiety. Therefore, if the participation of children in a democracy is to be free from fear, it is important to work with them in these initial phases of their lives, because this period of their life, as Sapiro (2004) has demonstrated, is essential in the formation of their points of view and their commitment towards good citizenship.

The differences between well-informed and poorly informed citizens can be dramatic (Delli Carpini, & Keeter, 1996: 272). Therefore, transmitting a better and a complete image of the intelligence services to younger citizens, when still forming their opinions on the concept of democracy, and transmitting what this political form of governance implies, will have two positive consequences. On the one hand, its consequence will be greater legitimacy and trust among citizens; and, on the other, it will imply increased decision-making capacity and informed opinions on the

actions carried out by the intelligence services (Díez-Nicolás, 2012: 162). Our project is inspired by that same logic; it contributes to bridging the information gaps and the existing stereotypes on the intelligence services through the development and testing of this pedagogic material, in such a way that the impact of historic events –all the greater at earlier ages (Schumann & Scott, 1989)– can be mitigated.

Ever since the 1960s, studies have been conducted on what the perceptions of young children are towards the police. However, the authors are unaware of any studies on the same topic, but with regard to spies. The logic behind this lack of studies is, in our opinion, that, unlike the police –and to some extent the military too– children and adolescents have no direct encounters with spies. Among other reasons, spies work undercover, children and adolescents are never likely to meet them or to interact with them, neither will they have close family members who identify themselves as spies, nor are spies identified with a logotype, and they have no visible installations that can be visited. Therefore, although we may learn from the methodology of those studies, comparisons with the way in which schoolchildren perceive the different law enforcement institutions of a democratic State are invalid. Nevertheless, we can indeed draw out some interesting reflections from these experiences for our study.

With regard to the methodology, we have found studies that measure knowledge and/or opinion at two points in time between which the children have been exposed to some form of input, as in this contribution. For example,

after a specific activity (Hopkins & al., 1992) or after interacting with the police at a school visit in the playground (Derbyshire, 1968). We also find studies with schools where the police are permanently stationed for crime-prevention and mediation tasks and other studies on schools where the police have no permanent presence (Hopkins & al. 1992), as well as studies completed after screening different videos to an audience of schoolchildren with fragments of police films and television series (Low & Durkin, 2001).

It must not be thought that all of the conclusions drawn from these studies can be generalized. For some authors, children not only distrust the police, but they also show a lack of understanding or hold misperceptions on the role of the police in society (Brown & Benedict 2002; Hurst & Frank 2000). The views of young people are in many studies worse than the views expressed by children (Loader, 1996; McAra & McVie, 2010), due to young people making greater use of public spaces. They also have a greater likelihood of entering into contact and indeed conflict with the police, including negative experiences of policing, as young people start to socialize more with peers in public spaces free from parental care. In studies from North America, trust in the police amongst ethnic minority communities is found to be considerably lower than in white communities (Hurst & al., 2000; Flexon & al., 2009). Evidence of gender differences in attitudes towards the police is mixed, with some studies finding no differences (Hinds, 2007), while others find that either males (Weitzer & Tuch, 1999) or females (Flexon & al., 2009) hold more negative views.

With the objective of supplementing the lack of educational materials designed for school children on the intelligence services, the authors conceptualized and designed two animated videos. The objective of this article was to measure the impact of having viewed the video on the knowledge, the stereotypes, and the attitudes of school children in relation to the Spanish intelligence service. Therefore, the research question proposed in this article is: how will viewing the videos on CNI modify the knowledge, the stereotypes, and the attitudes of school children in relation to the intelligence service? The hypothesis is that viewing the animated videos will increase knowledge of CNI, reduce stereotypes, and favor more positive attitudes.

**The screenings of the informative animated videos increased knowledge of the intelligence services, reduced stereotypes associated with the work of the agents, and increased positive attitudes towards the work of the CNI. Hence, our study has confirmed the starting hypothesis of the authors. The few studies completed with the police show a change before and after the children were exposed to the input.**

The investigation is designed as a quasi-experimental methodology, and the design involved only one group with which to evaluate the changes in the variables before and after having screened the corresponding video to each group. In section 2 of this paper, the process of designing the videos and the methodology of the study are set out. The results are summarised in section 3 and, in section 4, the results are discussed, and future lines of investigation that use the videos are proposed.

## 2. Material and methods

### 2.1. Preparation of the animated video

The initial objective was to prepare two animated videos for children between 8 and 11 years in age and for young adolescents between 12 and 16 years in age<sup>2</sup> through which to explain the role of an intelligence service –the Spanish CNI– in a democratic society<sup>3</sup>. The use of different formats was considered during the design of the project: comic, animated video, and story. However, directing the project at the generations that fit within what Palfrey & Gasser (2008) have baptized the generation of ‘digital natives’ led us to select the animated video rather than the comic or the story. In particular, the video format was justified insofar as i) it permits a combination of verbal, visual, textural, graphical, and musical mediums; ii) audio-visual channels are the principal on-line format that the target population consumes; and, iii) it can be reproduced on different channels (television, Internet) and devices (mobiles, computers, tablets, etc.), permitting individual screenings or as part of educational programs for citizenship.

The messages that were used to convey the information on the role of an intelligence service in a democratic State were known to the authors from previous research (Díaz-Fernández, 2005, 2016). The final list of messages included in the videos appears in Table 1. There were differences in the internal layout of the script, if those messages were: 1) Explicit (conveyed through explicit sentences in the text) or implicit (conveyed through images), or if they were; 2) Transversal (appearing throughout the video) or specific (appearing at a specific time in the video).

The scripts of the two videos were drafted on the basis of the final list of 14 messages. Due to the different degrees of maturity of both groups, some differences were established between both videos: 1) A simpler language with short sentences for the children; 2) Simplified messages for the children (for example, instead of the three forms of control, only judicial supervision was explained to them, as it was the one they knew best); and; 3) The use of simpler drawings in the video for the children with fewer details than in

the video for the adolescents (Image 1 & 2). The images were complemented with emotive, affective, decorative, and musical elements, in accordance with the suggestions from Barker & al. (2003) and Meyer (2012), adopting the recommendations and the experiences of the use of didactic videos compiled in Cabero (2004). The music was specially composed for both videos.

### 2.2. Participants

A total of 1,092 children and adolescents (n=1,092) participated in the study (with a confidence interval of 95% and margin of error of  $\pm 3\%$ ). The participants were drawn from eight Spanish schools in the cities of Cadiz, Jerez de la Frontera, Mairena del Aljarafe, Gines, and Seville. 489 (44.2%) of the participants were boys, and 603

**Table 1. List of messages by order of appearance and condition**

Messages to transmit	Condition
1) CNI is the acronym of the Centro Nacional de Inteligencia	Explicit, Specific
2) CNI is an entity that supports the decisions of the Government	Explicit, Transversal
3) Men and women work for the CNI in equal numbers	Implicit, Transversal
4) CNI employees are of all ages	Implicit, Transversal
5) They are agents, not spies, and there are two types: analysts and operators	Explicit, Transversal
6) The operatives obtain information through different mediums, and the analysts analyse it	Explicit, Specific
7) The intelligence report is the document where they express their conclusions	Explicit, Specific
8) Their work is different from the work of the police, the military, and private detectives	Explicit, Specific
9) They use no arms	Explicit, Specific
10) They have families and children, but their families may sometimes be unaware of their profession	Explicit, Specific
11) They have three forms of supervision: political, judicial, and parliamentary	Explicit, Specific
12) They have their headquarters in Madrid	Explicit, Implicit, Transversal
13) Anybody can work for the CNI	Explicit, Specific
14) They are not secret, but discrete	Explicit, Specific

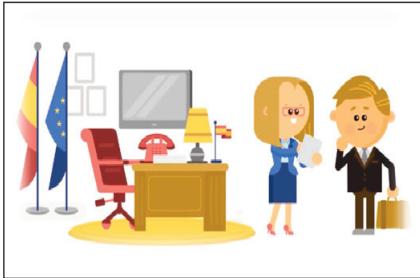


Image 1. Video characters for Primary School (EP) Pupils.



Image 2. Video characters for Secondary School (ESO) Pupils.

(55.8%) were girls.

The age of the sample fluctuated between 8 and 16 years old, with an average of 12.14 years (SD=2.54).

The educational levels of the school children corresponded to two educational stages: the group of "Primary Education"

(EP) was composed of 495 participants (45.3%), and the group of "Secondary Education" (ESO), of 597 participants (54.7%). In addition, each sample is close to the average size of the samples habitually used in studies on knowledge and evaluation of the police such as those by Moretz (1980) with 137 participants, Hurst & al. (2000) with 852, Nihart & al. (2005) with 1,029, and Sindall & al. (2016) with 1,500. The schools were selected in accordance with two criteria to guarantee the representativeness of the socio-economic and demographic data: i) model of management and funding (public, private, and state-assisted); and, ii) (low, medium, and high) socio-economic level. The schools were therefore categorized as follows: private/high (1); state-assisted/high (2); state-assisted/medium (2); public/medium (2); and, public/low (2). All the schools were in large, medium, and small cities with populations of between 700,000 and 13,000 inhabitants.

### 2.3. Questionnaire

The questionnaire was structured into four sections corresponding to the four variables under analysis with a total of 30 items: 1) Sociodemographic data; 2) Knowledge of CNI; 3) Stereotypes on the work of intelligence service agents; 4) attitudes towards CNI. The following describes the content of each of the four sections.

In sociodemographic data, only the educational stage (EP or ESO) and the sex of the participant were recorded. This decision was agreed with the teaching centres, to avoid having to request the informed consent of the parents when gathering a minimum of personal information (Thomas & O'Kane, 1998).

Knowledge of the CNI was measured through six items with three possible responses: one correct, another wrong, and a third that affirmed no knowledge (Don't know/No opinion). These responses scored between 0 and two following the criteria of Mondak (1999), according to which the assumption of not knowing is an intermediate measurement between right and wrong knowledge. Three levels were therefore defined: 0=wrong knowledge; 1=don't know; and 2=right knowledge. This measurement obtained acceptable scores for internal consistency ( $\alpha=.95$ ).

The stereotypes on the work of the intelligence agents were measured with 16 items divided into: 1) Stereotypes associated with the influence of the communications media (4 items) ( $\alpha=.88$ ); 2) Stereotypes associated with police work (4 items) ( $\alpha=.96$ ); 3) Stereotypes associated with military work (4 items) ( $\alpha=.50$ ); and, iv) stereotypes associated with the work of private detectives (4 items) ( $\alpha=.93$ ). As may be seen, the stereotypes associated with military work was the only block with no reliable internal consistency ( $\alpha \geq .70$ ). An analysis of the correlations matrix identified one of the items as related in a negative manner with the other items of the construct ("work together in a group"), so this item was removed from the final analysis, thereby obtaining greater internal consistency and reliability ( $\alpha=.81$ ). Each item was positively expressed (for example, "spies are secret") and the participants had to show their degree of agreement or disagreement with the affirmation on a 5-point Likert-type scale, where 1 was "completely disagree", and 5 was "completely agree", and where point 3 marked the intermediate point, "neither agree nor disagree". For the students of EP, emoticons were shown alongside the scale that expressed each of the grades, so that they would better understand the test responses.

The attitudes towards CNI were measured through six items on a 5-point Likert-type scale, where one was "completely disagree" and 5 "completely agree", and where point 3 marked the intermediate point, "neither agree nor disagree". Items 2, 3 and six were formulated in positive terms when describing the CNI, where one was considered as a completely negative attitude towards the CNI and five as a completely positive attitude towards CNI. During the preparation of the database, the scores for items 1, 4 and five that were formulated in negative terms, were inverted (1=5; 2=4; 4=2; 5=1) before the analysis was completed. In this way, high scores in the

sum of items indicated a favourable attitude towards the CNI. This measurement system yielded acceptable scores for internal consistency reliability ( $\alpha = .97$ ).

## 2.4. Procedure

The video was edited with the help of a communications company between April and October 2016. The first data-collection session, the video screening, and the second data-collection session with the students took place during October. The sample of participants was selected from among the schoolchildren at each centre by the Direction of the centre. An informed consent form was provided to the schools, although none of them considered its use necessary. Data collection was organized in two sessions with each one of the classes. During the first session, the participants were invited to fill in the questionnaire as a self-administered exercise. The researcher and the class tutors were at all times present to respond to the doubts of the participants and to supervise the collection of data so that it was done in the way that had been agreed with the centre. In the second session, the participants were shown the animated video corresponding to their educational stage (EP or ESO). Once the video had ended, the students were once again administered the same questionnaire as in the first session.

## 3. Analysis and results

The results obtained after the first administration of the questionnaire are shown in Table 2. As may be seen, the “average” level of knowledge of the participants was low, with 95.9% of participants giving responses between 0 –wrong knowledge– and 1 –no knowledge–. It was, in addition, observed that both the standard deviation and the variance were small. These data allowed us to conclude that both the EP and the ESO students held little or no knowledge of the CNI and its functions.

The second variable, “stereoty-

pes” received a higher score than the neutral value of three ( $3 =$  “neither agree nor disagree”). A priori, this result might indicate that the participants were so unaware of the matter that they were unable to identify each of the stereotypes included in the questionnaire. However, the analysis by type of stereotype –associated with the influence of the communications media, police work, military work, and the work of private detectives– yielded different results. In Table 3 it may be seen that the stereotypes associated with the communications media obtained the highest scores. The most representative features that the participants employed to refer to the work of a spy were, in the first and second place, “spies follow people who don’t know they are being followed” (100% scored it with a 5, “completely agree”) and “they infiltrate dangerous places” (70.3% scored it with a 5, “completely agree”). As with the variable “knowledge”, the standard deviation and the variance were small, from which it may be understood that the scores for the stereotypes were very similar.

	Media stereotypes	Police stereotypes	Military stereotypes	Detective stereotypes
Mean	4.15	3.57	2.17	3.82
Median	4.00	3.50	2.33	3.75
Mode	4.00	3.25	2.33	3.75
Std. Deviation	.46	.62	.25	.41
Variance	.22	.38	.06	.17

and I don’t know whether they are spying on me” and “I don’t trust them to work for the Spanish people”. These scores provide evidence that the participants perceive the CNI agents as “unknown”, “undercover”, and as “dangerous” agents who cannot be controlled. No significant differences were observed for the three variables according to the educational stage or the sex of the participants.

	Knowledge					Stereotypes					Attitudes				
	EP		ESO		Total	EP		ESO		Total	EP		ESO		Total
	Boy	Girl	Boy	Girl		Boy	Girl	Boy	Girl		Boy	Girl	Boy	Girl	
Mean	.50	.533	.53	.499	.515	3.4	3.39	3.42	3.46	3.43	2.01	2.02	2.07	2.04	2.04
Median	.50	.50	.50	.50	.50	3.43	3.37	3.44	3.43	3.44	1.83	2.0	2.00	1.83	1.84
Mode	.33	.33	.33	.33	.33	3.31	3.31	3.31	3.56	3.30	1.83	1.83	1.83	1.83	1.83
Std. Deviation	.30	.312	.30	.224	.282	.25	.223	.26	.279	.258	.39	.399	.42	.407	.40
Variance	.091	.097	.091	.05	.08	.064	.05	0.68	.078	.067	.153	.159	.173	.166	.163

Finally, with regard to the variable “attitudes”, it may be seen that the participants had in their majority negative attitudes towards CNI (Mean=2.04; Median=1.84; Mode=1.83) to a very similar extent. Specifically, the items for which the lowest scores were obtained, in first and second place, were “they are undercover,

and I don’t know whether they are spying on me” and “I don’t trust them to work for the Spanish people”. These scores provide evidence that the participants perceive the CNI agents as “unknown”, “undercover”, and as “dangerous” agents who cannot be controlled. No significant differences were observed for the three variables according to the educational stage or the sex of the participants.

### 3.1. Effects of video screenings

When analysing the differences between the scores obtained for the variables before and after the video screenings, it was concluded that those scores differed significantly with respect to all the items under analysis ( $p < 0.001$  and  $r > 0.8$  for all the t-tests). Under the variable “knowledge” ( $t = -151.850$ ;  $p < 0.001$ ;  $r = 0.97$ ), the screening of the video increased knowledge of the work, the organization, and the function of the CNI in a democratic State in the total sample of participants ( $Mean_{before} = .515$ ;  $Mean_{after} = 1.93$ ). The effect size of the video screening for this variable ( $r^2 = 0.95$ ) allows us to affirm that 95% of the observed increase in the scores for “knowledge” of participants was due to the screening of the videos.

**Table 4. Average scores by educational stage**

	Knowledge		Stereotypes		Attitudes	
	Before	After	Before	After	Before	After
EP	.519	1.92	3.40	1.53	2.02	4.58
ESO	.510	1.94	3.45	1.52	2.05	4.63

Note: All differences are significant ( $p < 0.001$ ).

**Table 5. Average scores by sex**

	Knowledge		Stereotypes		Attitudes	
	Before	After	Before	After	Before	After
Boys	.516	1.93	3.42	1.52	2.05	4.58
Girls	.514	1.93	3.43	1.53	2.03	4.62

Note: All differences are significant ( $p < 0.001$ ).

Statistically significant differences were also obtained for the variable “stereotypes” before and after the video screening ( $t = 193.849$ ;  $p < 0.001$ ;  $r = 0.97$ ). In total, the scores for “stereotypes” fell for all participants from 3.426 ( $Mean_{before} = 3.426$ ) to 1.526 ( $Mean_{after} = 1.526$ ).

Finally, the participants presented more favourable scores towards the CNI under the variable “attitudes” after the video screening corresponding to their age group ( $t = -177.682$ ;  $p < 0.001$ ;  $r = 0.98$ ), with an effect size for the video screenings of  $r^2 = 0.966$ , which allows us to affirm that 96.6% of the increase in the positive attitudes towards the CNI was due to the participants having watched the videos. In Tables 4 and 5, the average scores for “knowledge”, “stereotypes” and “attitudes” before and after the video screening are shown by educational stage and sex.

### 4. Discussion and conclusions

These data allow us to conclude that the screenings of the informative animated videos increased knowledge of the intelligence services, reduced stereotypes associated with the work of the agents, and increased positive attitudes towards the work of the CNI. Hence, our study has confirmed the starting hypothesis of the authors. The few studies completed with the police show a change before and after the children were exposed to the input, although not as significant, nor exclusively attributable to one variable, because, for example, in the studies with resident police officers, it was not possible to measure whether the impact was due to the presence of a police officer or because of the personality of the specific police officer present at the educational centre (Hopkins & al. 1992). However, the impact following the screening of the videos was higher than the impact reported in studies on the police force. Unlike the studies with the police, it was confirmed that the lack of direct contact with the intelligence service meant that the school children had weaker and more erroneous knowledge of their functions. However, despite that lack of knowledge, familiarity with the work ‘spy’ meant that they assumed the majority of stereotypes that are conveyed through the communications media in its broadest sense.

Moreover, there is a great similarity between the results for students of both sexes with the results in Hinds (2007) when, in other studies, it appeared that either one or the other sex was the most critical (Weitzer & Tuch, 1999; Flexon & al., 2009). The population of Spanish school children is therefore of greater similarity than those of other countries. Immigration is highly concentrated in some cities, and within those, in specific neighborhoods and colleges, so much so that the impact of that variable was not measured. Nevertheless, the schools that were selected showed a very wide socioeconomic composition, encompassing conflictive neighborhoods and elite centres of a religious nature, which strengthens the similarity of the views that were gathered following the screening of the video. Neither was an abrupt cut-off point observed between age groups (children and young adolescents), as was detected by Sindall & al. (2016).

The importance of having pedagogic materials for parents and educators has been demonstrated, in order to widen knowledge of the security institutions among children and young people across the world where the attacks that strike at the heart of our cities appear to be increasingly recurrent. Moreover, an understanding of the knowledge that school children hold of these “secret” agencies would be relevant information with which to develop information campaigns directed at improving their role in a democratic State. This is a line of work that the authors

wish to follow in a subsequent phase, in collaboration with professionals to develop didactic units that can be employed individually or jointly with other materials and campaigns.

The videos will be used in future investigations to see whether they reduce the fear of terrorism and perceptions of insecurity among school children, considering variables such as hours of exposure to the news and use of social media. These variables have been proposed in the studies of Smith & Wilson (2002), which established that watching television was a predictor of sensations of fear, and that of Comer & al. (2008), which established that time viewing the television and Internet were variables associated with anxiety, perceptions of fear, and personal vulnerability. Our hypothesis for future research is that the improved knowledge provided by the videos would help to soothe the anxiety and the stress expressed by young people in reaction to the news of terrorist attacks when the story of the “baddies” confronts the story of the “goodies” within a State that is there to protect them and yet, as has been confirmed, remained imperceptible.

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### Notes

- <sup>1</sup> Although the authors prefer the term ‘agent’, for the purposes of clarity, the more common term of ‘spy’ was used with young children.
- <sup>2</sup> The Spanish Educational System is organized in its obligatory phase in Primary Education (Educación Primaria) (EP), between 6 and 12 years in age and Compulsory Secondary Education (Educación Secundaria Obligatoria) (ESO) from 12 to 16 years in age.
- <sup>3</sup> The videos are available from the following link <http://bit.ly/2BMmvTF> to the University of Cadiz

### References

- Barker, J., & Weller, S. (2003). ‘Is it fun?’ Developing children centred research methods. *International Journal of Sociology and Social Policy*, 23(1/2), 33-58. <https://doi.org/10.1108/01443330310790435>
- Brown, B., & Benedict, W. (2002). Perceptions of the police: past findings, methodological issues, conceptual issues, and policy implications. *Policing*, 25, 543-580. <https://doi.org/10.1108/13639510210437032>
- Cabero, J. (2004). El diseño de vídeos didácticos. In J. Salinas, J. Cabero & I. Aguaded (Coords.), *Tecnologías para la educación: diseño, producción y evaluación de medios para la formación docente* (pp. 141-156). Madrid: Alianza.
- Carpenter, A.L., Elkins, R., Kerns, M., Chou, C., Green, T., & Comer, J. (2012). Event-related household discussions following the Boston marathon bombing and associated posttraumatic stress among area youth. *Journal of Clinical Child & Adolescent Psychology*, 46, 331-342. <https://doi.org/10.1080/15374416.2015.1063432>
- Comer, J.S., & Kendall, P. (2007). Terrorism: the psychological impact on youth. *Clinical Psychology*, 14, 179-212. <https://doi.org/10.1111/j.1468-2850.2007.00078.x>
- Comer, J.S., Furr, J.M., Beidas, R.S., Babyar, H.M., & Kendall, P.C. (2008). Media use and children’s perceptions of societal threat and personal vulnerability. *Journal of Clinical Child & Adolescent Psychology*, 37(3), 622-630. <https://doi.org/10.1080/15374410802148145>
- Delli-Carpini, M., & Keeter, S. (1996). *What Americans know about politics and why it matters*. New Haven: Yale University Press.
- Derbyshire, R.L. (1968). Children’s perceptions of the police: a comparative study of attitudes and attitude change. *Journal of Criminal Law and Criminology*, 59(2), 183-190. <https://doi.org/10.2307/1141938>
- DeVoe, E.R., Bannon, W., Klein, T.P., & Miranda-Julian, C. (2011). Young children in the aftermath of the World Trade Center attacks. *Psychological Trauma*, 3(1), 1-7. <https://doi.org/10.1037/a0020567>
- Díaz-Fernández, A.M. (2005). *Los servicios de inteligencia españoles*. Madrid: Alianza.
- Díaz-Fernández, A.M. (2016). *Espionaje para políticos*. Valencia: Tirant Lo Blanch.
- Díez-Nicolás, J. (2012). La imagen de los servicios de inteligencia en la sociedad. *Inteligencia y Seguridad*, 12, 161-181. <https://doi.org/10.5211/ys.11.article8>
- DiSessa, A. (1982). Unlearning Aristotelian physics: a study of knowledge-based learning. *Cognitive Science*, 6, 37-75. [https://doi.org/10.1207/s15516709cog0601\\_2](https://doi.org/10.1207/s15516709cog0601_2)
- Field, A.P., & Lawson, J. (2003). Fear information and the development of fears during childhood: effects on implicit fear responses and behavioural avoidance. *Behaviour Research and Therapy*, 41, 1277-1293. [https://doi.org/10.1016/S0005-7967\(03\)00034-2](https://doi.org/10.1016/S0005-7967(03)00034-2)
- Flexon, J.L., Lurigio, A.J., & Greenleaf, R.G. (2009). Exploring the dimensions of trust in the police among Chicago juveniles. *Journal of Criminal Justice*, 37(2), 180-189. <https://doi.org/10.1016/j.jcrimjus.2009.02.006>
- Garbarino, J., Governale, A., Henry, P., & Nesi, D. (2015). Children and Terrorism, Sharing child and youth development knowledge. *Social Policy Report*, 29(2). <https://goo.gl/uqoCJC>
- Gardner, H. (1991). *The unschooled mind: how children think and how schools should teach*. New York: Basic Books.
- Hinds, L. (2007). Building police-youth relationships: the importance of procedural justice. *Youth Justice*, 7(3), 195-209. <https://doi.org/10.1177/1473225407082510>
- Hopkins, N., Hewstone, M., & Hantzi, A. (1992). Police-schools liaison and young people’s image of the police: An intervention evaluation. *British Journal of Psychology*, 83, 203-220. <https://doi.org/10.1111/j.2044-8295.1992.tb02435.x>

- Hoven C.W., Duarte, C.S., Wu, P., & Rosen, C. (2002). *The effects of the World Trade Center attack on New York City public school students. Initial report to the New York City Board of Education*. New York State Psychiatric Institute, New York.
- Hurst, Y.G., Frank, J., & Browning, S.L. (2000). The attitudes of juveniles toward the police: A comparison of black and white youth. *Policing*, 23, 37-53. <https://doi.org/10.1108/13639510010314607>
- Hurst, Y.G., & Frank, J. (2000). How kids view cops: the nature of juvenile attitudes toward the police. *Journal of Criminal Justice* 28, 189-202. [https://doi.org/10.1016/S0047-2352\(00\)00035-0](https://doi.org/10.1016/S0047-2352(00)00035-0)
- Jaramillo, A. (2005). Fictional video and scientific education: a paradoxical relationship. [Video argumental y educación en ciencias: una relación paradójica]. *Comunicar*, 24, 121-128.
- Klein, T.P., Devoe, E.R., Miranda-Julian, C. and Linas, K. (2009). Young children's responses to September 11th: The New York City experience. *Infant Mental Health Journal*, 30, 1-22. <https://doi.org/10.1002/imhj.20200>
- Loader, I. (1996). *Youth, Policing, and Democracy*. Basingstoke: Macmillan. <https://doi.org/10.1057/9780230373839>
- Low, J., & Durkin, K. (2001). Children's conceptualization of law enforcement on television and in real life. *Legal & Criminological Psychology*, 6, 197-214. <https://doi.org/10.1111/j.2044-8295.1992.tb02435.x>
- McAra, L., & McVie, S. (2010). Youth crime and justice: Key messages from the Edinburgh study of youth transitions and crime. *Criminology and Criminal Justice* 10(2), 179-209. <https://doi.org/10.1177/1748895809360971>
- McGarty, C., Yzertbyt, V.Y., & Spears, R. (2002). Social, cultural and cognitive factors in stereotype formation. In C. McGarty, & R. Spears (Eds.), *Stereotypes as explanations. The formation of meaningful about social groups*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511489877.002>
- Meyer, M.E. (2012). New directions in critical television studies: Exploring text, audience, and production in communication scholarship. *Communication Studies*, 63(3), 263-268. <https://doi.org/10.1080/10510974.2012.684291>
- Mondak, J.J. (1999). Reconsidering the measurement of political knowledge. *Political Analysis*, 8(1), 57-82. <https://doi.org/10.1093/oxford-journals.pan.a029805>
- Moretz, W.J. (1980). Kids to cops 'We think you're important, but we're not sure we understand you'. *Journal of Police Science and Administration*, 8(2), 220-224.
- Nihart, T., Lersch, K.M., Sellers, C.S., & Mieczkowski, T. (2005). Kids, cops, parents and teachers: exploring juvenile attitudes toward authority figures. *Western Criminology Review*, 6(1), 79-88.
- Palfrey, J., & Gasser, U. (2008). *Born digital: Understanding the first generation of digital natives*. New York: Basic Books.
- Pfefferbaum, B., Phebe, T., & Rose, L. (2018). Media effects in youth exposed to terrorist incidents: A historical perspective, child and family disaster psychiatry. *Current Psychiatry Reports*, 20(11), 1-11. <https://doi.org/10.1007/s11920-018-0875-1>
- Punch, S. (2002). Research with children: The same or different from research with adults? *Childhood*, 9(3), 32-41. <https://doi.org/10.1177/0907568202009003005>
- Quintelier, E. (2015). Intergenerational transmission of political participation intention. *Acta Politica*, 50(3), 279-296. <https://doi.org/10.1057/ap.2014.19>
- Romer, D., Jamieson, K.H., & Aday, S. (2003). Television news and the cultivation of fear of crime. *Journal of Communication*, 53, 88-104. <https://doi.org/10.1111/j.1460-2466.2003.tb03007.x>
- Sapiro, V. (2004). 'Not your parents' political socialization: Introduction for a new generation. *Annual Review*, 7(1), 1-23. <https://doi.org/10.1146/annurev.polisci.7.012003.104840>
- Schumann H., & Scott, J. (1989). Generations and collective memories. *American Sociological Review*, 54, 359-81. <https://doi.org/10.2307/2095611>
- Sindall, K., McCarthy, D.J., & Brunton-Smith, I. (2016). Young people and the formation of attitudes towards the police. *European Journal of Criminology*, 14(3), 344-364. <https://doi.org/10.1177/1477370816661739>
- Smith, S.L. & Wilson, B.J. (2009). Children's comprehension of and fear reactions to television news. *Media Psychology*, 4(1), 1-26. [https://doi.org/10.1207/S1532785XMEP0401\\_01](https://doi.org/10.1207/S1532785XMEP0401_01)
- Starkey, H. (2012). Human rights, cosmopolitanism and utopias: Implications for citizenship education. *Cambridge Journal of Education*, 42(1), 21-35. <https://doi.org/10.1080/0305764X.2011.651205>
- Thomas, N., & C. O'Kane. (1998). The ethics of participatory research with children. *Children and Society*, 12, 336-48. <https://doi.org/10.1111/j.1099-0860.1998.tb00090.x>
- Van-Deth, J.W., Abendschön, S., & Vollmar, M. (2011). Children and politics: an empirical reassessment of early political socialization. *Political Psychology*, 32(1), 147-173. <https://doi.org/10.1111/j.1467-9221.2010.00798.x>
- Weitzer, R., & Tuch, S.A. (1999). Race, class, and perceptions of discrimination by the police. *Crime & Delinquency*, 45(4), 494-507. <https://doi.org/10.1177/001128799045004006>