

# **Teaching about terrorism**

## Evaluating a historicizing pedagogy in times of crisis and disruption

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# Abstract

This evaluation study investigated the impact of a historicizing workshop on terrorism in Dutch secondary education on students' self-reported fear levels, statistical and historical knowledge concerning terrorism, and perceived control. Our pedagogy emphasized terrorism's historical roots and provided facts about the threat of terrorism and knowledge to help students gain a sense of control over it. We used a pretest-posttest design and mixed-method approach. 390 students completed a survey before and after the workshop and 20 students were interviewed. The quantitative results show that students gained statistical and historical knowledge concerning terrorism and experienced a significant increase in perceived control over the threat of terrorism. Moreover, they showed a significant reduction in fear levels. The qualitative results tentatively suggest that increasing knowledge on terrorism (factual, historical, and knowledge on preventing attacks and managing their impact) can help reduce fear. This paper provides implications for teaching terrorism in secondary education.

# **Keywords**

historicizing pedagogy, terrorism, evaluation study, fear of terrorism, history education

# **1. Introduction**

The core goal of terrorists is to target public perception by exacerbating fear among citizens through the use or threat of violence (Braithwaite, 2013). While terrorists aim at society at large, research has shown that minors are disproportionately impacted by terrorist attacks compared to adults (Pfefferbaum et al., 2003), due to their limited ability to cognitively understand the rationale behind terrorism (Van Overmeire et al., 2020). The impact caused by attacks is not limited to minors who are directly exposed to terrorist violence, but also felt by those learning about the attack from a distance, i.e., through media coverage or discussion with peers (Van Overmeire et al., 2020). These indirectly exposed minors tend to overestimate the risk terrorist violence poses, which might increase fear (Van Overmeire et al., 2020). This can partly be explained by the terrifying images and intense projections of threat, uncertainty, and danger that minors are ex-

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posed to on (social) media following an attack (Comer & Kendall, 2007). To date, little is known about the level of fear of terrorism amongst minors who are indirectly exposed to it (Van Overmeire et al., 2020). Just like their peers who are directly affected by terrorism, they need coping mechanisms to deal with fear, violence, and feelings of injustice, and to strengthen their sense of control over seemingly uncontrollable events.

In contrast to sensationalist media stories, schools can offer a safe space in which students can systematically learn about the history and impact of terrorism. Although few studies have examined the impact of educational interventions on terror-induced fear and perceived threat, the results are promising (Fischer et al., 2011; Krause et al., 2022; Theriault et al., 2017). The key lies in the knowledge-based approach of these interventions: learning about terrorism and terrorists' motives makes the phenomenon less frightening and helps students better assess the threat it poses. However, these studies only address one type of knowledge, focusing on the rationale behind terrorism, and are limited to students in higher education and the US context. Various studies suggest that other types of knowledge, such as facts and figures about the actual threat of terrorism, a historical framework, and knowledge to help students gain a sense of control over the threat of terrorism could be effective in reducing terror-induced fear (e.g., Greenaway et al., 2014).

In this paper, therefore, we explore to what extent providing information about the actual threat of terrorism, placing the phenomenon in a historical context, and helping students gain a sense of control over the threat of terrorism can help reduce students' fear of terrorism. We suggest that providing a historicizing pedagogy through which students can orient themselves in time and place can help them to build resilience against the uncertainty of terrorist attacks, making history education directly relevant for the students' personal lives (Van Straaten et al., 2016; Wansink et al., 2021). In line with this, we investigated the effects of "What is terrorism?": a workshop in Dutch secondary education conducted by TerInfo.<sup>1</sup> TerInfo is a multidisciplinary pedagogical project within Utrecht University, The Netherlands, that helps teachers discuss terrorism and other disruptive events in a historicized way by providing educational support (i.e., materials, workshops) and conducting research. We used a pretest-posttest design and mixed-method approach to investigate the impact of the workshop on the students' fear levels. perceived control, and (historical and statistical) knowledge. 390 students, aged 12-19 years old, across different levels of Dutch secondary education school classes participated in this study by filling in a survey before and after the workshop, and 20 students engaged in a supplementary interview.

By analyzing the impact of the workshop, we want to explore the relevance of our historicizing pedagogy on terrorism and what types of knowledge can help students to better understand terrorism as a phenomenon and reduce the fear it causes. Our aim is to make history education relevant for overcoming and understanding tensions in our current times and promote student well-being. Moreover, our insights can provide history teachers and curriculum designers with design criteria to teach about terrorism and other disruptive events in an informed way.

## 2. Theoretical framework

#### 2.1 Fear of terrorism and perceived risk among minors

Fear of terrorism can be defined as "an individual's anxiety about terrorist attacks" (Van der Does et al., 2021, p. 1279). Terror-induced fear can be especially high among minors, due to their feelings of helplessness, uncertainty, and limited ability to cognitively understand the context behind terrorists' actions (e.g., Van Overmeire et al., 2020). While research has examined the impact on minors who experienced terrorist violence firsthand such as high rates of post-traumatic stress disorders (Gurwitch et al., 2002) and depression (Kar, 2019), less is known about the impact on minors who experienced the attacks indirectly, i.e., through (social) media coverage or discussions with peers (Van Overmeire et al., 2020). The few studies that have been conducted on the effect of indirect exposure to terrorism on minors show that terrorism has a destabilizing effect on these minors too, causing psychological distress (Comer & Kendall, 2007), increased fear of terrorism, and increased perceived risk (Nellis & Savage, 2012).

<sup>1</sup> https://terinfo.nl

Related to terror-induced fear is the concept of perceived risk of terrorism. Perceived risk can be defined as the perceived likelihood of future terrorist attacks and is positively predicted by fear of terrorism (Kule et al., 2021). Building on previous research, we discern two forms of threat perception: societal (estimated likelihood of attacks in one's country in the next years) and personal threat perception (estimated likelihood of oneself or a family member becoming a victim of an attack) (e.g., Comer et al., 2008).

#### 2.2 Types of knowledge to decrease terror-induced fear

Minors that are indirectly exposed to terrorism require tools to make sense of and decrease their fear of the terrifying events happening worldwide. Based on the work of Krause and colleagues (2022), we believe that education on terrorism has the potential to decouple the factual knowledge regarding terrorism from the negative emotions students attach to them. The classroom environment allows students to systematically learn about terrorist attacks without the sensational and emotional baggage of media environments (Halperin et al., 2013).

Despite the potential relevance of the educational setting to decrease fear of terrorism, there is a lack of studies on the impact of educational interventions with this aim. The few studies that have been conducted show that improving knowledge is crucial in reducing terror-induced fear in minors (Fischer et al., 2011; Krause et al., 2022; Theriault et al., 2017). These studies are aimed at teaching students about the rationale behind terrorism in the context of American higher education. We build on these studies by incorporating other types of knowledge into the intervention and extending it to another context. Based on various studies, we have incorporated three types of knowledge that might help reduce students' fear of terrorism (e.g., Greenaway et al., 2014). In the following sections, we further introduce these: 1) facts and figures about the actual threat of terrorism, 2) providing a historical framework, and 3) knowledge to help students gain a sense of control over the threat of terrorism.

## 2.2.1 Facts and figures about the actual threat of terrorism

Statistically, the probability of becoming a victim of terrorism is extremely low worldwide, especially in Western Europe. For example, in the Netherlands only six people have died from terrorist violence since 2000, though each incident caused a tremendous shock in society. Despite the very small chance of becoming a victim of terrorism, research shows that people tend to overestimate the threat of terrorism (Kearns et al., 2021). For example, a study by Huddy and colleagues (2002) found that after the 9/11 terrorist attacks, people estimated the likelihood that a terrorist attack would occur in America in the near future much higher than they did before. In the Dutch context, recent research conducted by TerInfo among children aged 10-12 showed that although the number of attacks in the Western world decreased in 2022 (Institute for Economics & Peace, 2022), 87% of students thought the number of attacks was increasing and 34% considered terrorism a serious threat (Vleeskens et al., 2023). These analyses reveal the discrepancies between the overestimation of the probability of a terrorist attack or being victimized by terrorist violence and the small likelihood of actually encountering an attack (Skøt et al., 2021).

Media exposure tends to influence the discrepancy between reality and people's perceptions of terrorism (Pfefferbaum et al., 2001), leading to excessive safety concerns, a lower sense of control, and a sense of helplessness, due to the uncertainty and unpredictability of an attack (Huddy et al., 2002; Rubaltelli et al., 2018). By helping minors to interpret facts and figures about the actual threat of terrorism, educators could provide them with a rational grip on an emotion-al matter (Sjøen, 2023).

## 2.2.2 Placing terrorism in a historical framework

When a violent event occurs, such as a terrorist attack, a sense of shock and urgency prevails in society. Minors often encounter these events unfiltered through graphic images on social media (Comer & Kendall, 2007). Because of their young age and limited historical awareness, minors will likely not have adequate background knowledge to consume and contextualize news related to terrorism, and they will be less able to develop a grasp on this news or situate themselves in response to that news on their own (Wansink et al., 2021). Hence, they need a framework to help interpret what is happening around them, history can provide such a framework (Mosborg, 2002).

Central to our pedagogy is the historicization of present-day disruptive moments: temporarily zooming out of the contemporary event and zooming in on the past. This pedagogy connects the past, present, and future in a way in which history helps to assess, explain, and predict present-day disruptive events (Rüsen, 1989; Van Straaten et al., 2016). Furthermore, sensitive and controversial topics (e.g., terrorism) can evoke such high emotions and strong opinions that it can be difficult to have a conversation about them in class (Goldberg & Savenije, 2018). Historicization can be used to defuse such heated debates by placing the phenomena into a larger historical context or by comparing analogous cases over time (Van Straaten et al., 2019). By relating the "hot" present issue to the past, it cools down for students, making them less anxious and more able to discuss the topic at hand, as it no longer poses a direct threat to them.

The Waves Theory, developed by historian and political scientist David Rapoport, is an example of a historical framework which is well suited to historicize terrorism (De Graaf, 2021; Rapoport, 2002).<sup>2</sup> By placing the course of (modern) terrorism on a timeline and visualizing it as four different waves, propelled by distinct events, ideologies, motives, and situations, Rapoport's theory teaches three important lessons. First, it explains that terrorism is not a new phenomenon but has a longer history, which we can learn from when dealing with current attacks or waves of terrorism. Historicizing terrorism enables minors to place terrorist events in a larger perspective and helps them assess their own position toward these violent trends (Wansink et al., 2021). Students can learn that people before them dealt with the same phenomena as an enduring human issue and found ways to deal with them (Van Straaten et al., 2016). Second, terrorism is not a unilateral concept; attacks have been committed from various motives and rationales. For example, the theory shows that terrorism is not inherently religious or jihadist (Rapoport, 2002). Third, terrorist violence waxes and wanes, as is exemplified by the wave metaphor. Until now, every terrorist trend has come to an end, so the theory can help us predict that the wave we encounter now, and future waves, will also come to an end (Wansink & De Graaf, 2019). Comprehending this can provide comfort and improve well-being.

These lessons are well suited for an educational setting, because they help teachers and minors alike to situate contemporary events in a broader framework which might help them to make sense of terrorist attacks and their threat and defuse the conversation about them in class (Wansink & De Graaf, 2019). By historicizing terrorism in educational programs, teachers can both challenge the terrorists' aim of sowing fear and panic amongst the population and provide their students with clues and cues to "deal" with terrorism as an analyzable and even manageable problem in time and space.

#### 2.2.3 Helping students gain a sense of control over the threat of terrorism

Terrorist attacks might seem uncontrollable events and are in fact very hard to prevent. However, individuals and society as a whole can play a role in managing the effects of terrorism, and police and security forces have successfully prevented attacks in the past. We pose that perceiving terrorism as an uncontrollable phenomenon could lead to fear of terrorism. Conversely, research has shown that a high level of perceived control helps people cope with threatening situations because it restores their sense of psychological security and stability (Greenaway et al., 2014). Perceived control is defined as "a person's perceived degree of control over a stressful encounter" (Zeidner, 2005) and can offer a psychological means of protection in situations of perceived threat and danger (Greenaway et al., 2014). In the context of terrorism, perceived control can be seen as a coping resource to help people manage stressors more effectively related to the exposure to terrorist attacks (Zeidner, 2005).

In order to increase minors' sense of control over terrorism, we suggest it might help to provide knowledge on two aspects of perceived control. The first aspect is knowledge on what we can do ourselves to help minimize the effects of terrorist attacks (Wansink & De Graaf, 2019). The second aspect is on the level of police and security forces. By increasing students' knowledge on how the police and security forces counter terrorism and by demonstrating that they have prevented many attacks in the past, students learn that the police and security forces attempt to control terrorism.

<sup>2</sup> This theory has been met with some criticism (e.g., Parker & Sitter, 2016) but can still be used as an empirical grid for studying terrorism over time.

### 2.3 Current study

Terrorist attacks disproportionally affect minors, resulting in heightened fear of terrorism, an overestimation of its threat, and difficulties in putting attacks into perspective. To deal with this, minors require tools to make them more resilient in order to increase their well-being. Schools prove to be a suitable context to provide these. In our historicizing workshop, we focused on three types of knowledge (i.e., statistical knowledge, historical knowledge, and knowledge to help students gain a sense of control over the threat of terrorism) that might help to decrease students' fear levels regarding terrorism. This study evaluates the impact of this workshop. Therefore, our research questions are the following:

- 1. Did students' self-reported fear levels, statistical knowledge, historical knowledge of terrorism, and perceived control change after they participated in a historicizing workshop about terrorism?
- 2. What (type of) qualitative indications did students provide for changing their selfreported fear levels, statistical knowledge, historical knowledge, and perceived control?

## 3. Methodology

### **3.1 Participants**

Participants were recruited using a convenience sampling technique between May and November 2022. Overall, 601 students from 28 classrooms and 10 different schools participated. Students, parents of students under the age of 16, and schoolboards were informed about the purpose of the study and were asked for consent.

Because of missing data from two classrooms, we analyzed the data from 26 classrooms. In addition, 167 students completed only the pre-test, 24 students completed only the post-test, and 20 students provided incomplete data (i.e., filled in less than 80% of the survey). The final sample consisted of 390 students. Students' ages ranged between 12 and 19 years old (M = 14.58, SD = 1.48). Students reported their gender as female (58%), male (35%), non-binary (2%), or "preferred not to respond" (4%). The cultural background of students varied, including students who identified with single nationalities (N = 310), such as Dutch (76%) or Turkish (1%), and double nationalities (N = 51), such as Dutch and Indonesian (4%). The majority of students did not identify with any religion (57%), others identified with Christianity (31%), Islam (3%), Judaism (0.2%), and Buddhism (0.2%). The students came from different educational levels: preparatory secondary vocational education (vmbo, N = 59), higher general secondary education (havo, N = 66), pre-university education (vmo (N = 90). In addition to our quantitative approach, we interviewed 20 students (13 female, seven male) on a voluntary basis from seven different schools, ranging in age between 12 and 19 years old (M = 15.55, SD = 1.90).

#### 3.2 Design and procedure

This study used a one-group pretest-posttest design with a mixed-method approach. Students completed a survey before and after the workshop "What is terrorism?". See Table 1 for a description of the lesson plan of this 50-minute workshop. All educational materials related to the workshop can be found in the Supplemental Materials (Bammens et al., 2025). The workshop's learning objectives are that students learn 1) what terrorism is, 2) to put terrorism in a historical perspective, 3) to better assess the threat of terrorism, and 4) that everyone in society can play a role in countering terrorism. Additionally, 20 students were interviewed after the workshop, selected on a voluntary basis. The closed questions on the survey were quantitatively analyzed to examine research question 1, the open questions on the survey and interview were qualitatively analyzed to answer research question 2.

Time- frame in min- utes	Торіс	Activity	Correspond- ing variable	Example
0-5	Introduction and prior knowl- edge	Answer question 'what do you think of when you hear the word terrorism', which translates into a word cloud		
5-20	What is terror- ism?	Definition of terrorism is provided, comprehension is checked by a short quiz, mul- tiperspectivity is explained		Perspectives of free- domfighter versus terrorist
20-35	Question 1: How old is terrorism?	Answer question with histor- ical information, watch a vid- eo about the Waves Theory, discuss main take-aways	Historical knowledge	
35-40	Question 2: Is the number of terrorist at- tacks increasing or decreasing worldwide?	Answer question with statis- tical information, look at and reflect on figures	Statistical knowledge	One of the figures shows that the num- ber of attacks world- wide has dropped significantly since 2014
40-45	Question 3: How many people have died as a result of a ter- rorist attack in the Netherlands since 2000?	Answer question with sta- tistical information, teach- er explains how terrorism is countered in the Nether- lands and that this policy is effective	Statistical knowledge & perceived control	
45-50	Conclusion	Summarize lessons learned, discuss what students them- selves can do against terror- ism	Perceived control	E.g., by not sharing images of attacks, not letting oneself be unnecessarily frightened, and look- ing for commonali- ties rather than dif- ferences

#### Table 1: Short description of the lesson plan of the workshop "What is terrorism?"

#### **3.3 Measurements**

#### 3.3.1 Survey

All multiple-choice items on the survey used a five-point Likert scale, for example from 1 (Not afraid or totally disagree) to 5 (Very afraid or totally agree). The survey also included open-ended questions, since open questions are recommended in more exploratory and complex studies to increase the ecological validity (Miles & Huberman, 1994). To test and improve the validity of the survey items, we piloted the survey in two classes of a Dutch secondary school. Additionally, two students per class participated in cognitive interviews where we inquired if the survey items were clear (Willis & Artino, 2013). We also tested the content validity of the survey by asking experts (on pedagogy and quantitative methods in empirical studies) to review the survey (Fernández-Gómez et al., 2020). As a result, we modified the formulations in the introduction and revised some of the items when it became apparent that students did not comprehend their intended meaning.

In Table S1 (available online as Supplemental Material) we provided a description of all the items and details on the measurement and data analysis (Bammens et al., 2025). To measure students' fear levels, we used six multiple choice items adapted from existing surveys by Comer and colleagues (2008) and Al-Badayneh and colleagues (2011). For example, we asked students "How afraid of terrorism are you?". For statistical knowledge on the number of victims in the Netherlands and terrorist attacks worldwide, we used two single items (e.g., "According to you, how many people have died as a result of a terrorist attack in the Netherlands since 2000?"). We measured historical knowledge on terrorism operationalized as the Waves Theory (Rapoport, 2002) and religious association, and used two single multiple-choice items (e.g., "Terrorism is more prevalent in some periods than others"). For perceived control on the individual and societal level we used two single multiple-choice items (e.g., "Police and security forces can prevent terrorism from taking place in the Netherlands") adapted from Greenaway and colleagues (2014).

In the post-test we asked students five evaluative questions to assess the quality of the workshop (e.g., "What was good about the workshop?") and to reflect on its learning goals. The question "In what ways did you think differently about terrorism after the workshop? If you don't know, fill in 'don't know'" was used in our qualitative analysis to answer research question 2.

#### 3.3.2 Interview

Following the topics from the survey, we asked students in the semi-structured interviews after the post-test to explain some of their answers, if their answers had changed after the workshop and, if that was the case, why they had. The complete interview protocol and topic list is available online in the Supplemental Materials (Bammens et al., 2025). We asked students for example: "Do you fear terrorism? Did your answer change because of the workshop?". These data were also used to answer research question 2. Additionally, we used the interview transcripts to gain more in-depth understanding to the closed items in the survey on statistical and historical knowledge.

#### 3.4 Data-analysis

#### 3.4.1 Quantitative data-analysis

As one item on statistical knowledge was an open-ended question, we recoded students' answers into a numerical format. For example, "approximately 500" was recoded as "500", and "between 10,000 and 15,000" became "12,500". We coded the following answers as missing values: "I don't know" (N = 61), "not a lot/a couple" and "many/a lot/numerous/quite many" (N = 18).

For the final data analysis, we first assessed the data distribution for normality and potential outliers. To answer the first research question, we used Wilcoxon signed-rank tests, because assumptions of normality were not met. Statistical significance was defined at p < .05. We calculated Cohen's d effect sizes by transforming the Wilcoxon test z score using the online effect size calculator Psychometrica (Lenhard & Lenhard, 2016). We used IBM SPSS Statistics (Version 28) for all our quantitative analyses.

#### 3.4.2 Exploratory factor analysis and reliability analysis on fear levels

We investigated the factorial structure of the six fear items with an exploratory factor analysis (EFA). The Keiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity were used to assess the suitability of the data for factor analysis. Principal component analysis was employed as the extraction method. Eigenvalues greater than 1 were used to determine the number of factors to retain. The analysis revealed that two factor-solutions explained 60% of the variance. According to our interpretation of this result, and considering previous research differentiating between personal and societal threat (e.g., Comer et al., 2008), factor 1 encompassed items (1, 4, 5, 6) associated with personal-related fear of terrorism. Factor 2 consisted of items (2 and 3) associated with societal-related fear of terrorism (national and regional level, Al-Badayneh et al., 2011). The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.71, indicating that the sample was adequate, and Bartlett's test of sphericity gave a *p*-value of < .001.

In addition, a reliability analysis using the Cronbach's Alpha coefficient was performed to assess the internal consistency and reliability of the two fear level factors on personal and societal fear. The analysis showed a sufficient Cronbach's Alpha ( $\alpha$  = .82) on a combination of items (1, 4, 5, 6) that measured personal-related fear. However, the items 2 and 3 measuring societal threat showed an insufficient Cronbach's Alpha ( $\alpha$  = .34) and therefore we excluded this factor from our analysis.

#### 3.4.3 Qualitative data-analysis

We conducted a qualitative content analysis using open and axial coding (Boeije, 2010) to identify patterns in the data from the explanatory open-ended questions of the pre- and post-survey on fear and perceived control. First, we openly and axially coded a section of the pre-test data. The axial codes were organized into a coding scheme. Next, the post-test data were openly coded to list if it suited the coding scheme of the pre-test. Some sub-codes were added, and some code-names were broadened or changed. For example, after the workshop, students were able to name more examples of actions they could undertake themselves against terrorism. The code "yes, awareness and knowledge" was expanded to include the sub-codes "talking about it", "no/less attention to it" and "less division". Once all data were collected, the coding scheme and data were transferred to the coding software NVivo (version 1.6.1), where the axial coding of all data was completed.

The transcripts of the interviews and answers to the evaluative question were coded manually, without coding software. A Word document was made with the variables, and excerpts of the transcript were copied and pasted in this document to the variable it corresponded to.

All coding was done by the first author. Codes or segments of text that were in doubt by the coder were discussed with at least one co-author. A feedback loop was used throughout the coding process, in which the codes and categorization were continuously reviewed. To increase the reliability of the study, an audit trail was conducted with an external auditor who revised and assessed the entire qualitative data collection and analyses (Akkerman et al., 2008). More information about the qualitative data collection, analyses, and the report of the auditor can be found in the audit trail report available online as Supplemental Material (Bammens et al., 2025).

## **4 Results**

Dependent variables	Pre-test			Post-test			Wilcoxon test	
	Ν	М	SD	Ν	М	SD	Z**	d***
Statistical knowledge								
Number of victims in the Netherlands	307	504423.4	5811046.1	379	934.0	15615.3	-14.80*	0.87
Attacks worldwide	332	3.7	0.9	376	2.4	1.2	-12.06*	0.68
Historical knowledge								
Waves Theory	349	3.8	1.1	383	4.1	1.2	-4.35*	0.23
Religious association	341	2.5	1.3	380	2.1	1.2	-4.21*	0.22
Perceived control								
Individual perceived con- trol	321	2.2	1.2	366	3.0	1.2	-8.23*	0.46
Perceived control of the police and security forces	367	3.5	1.0	379	3.9	1.0	-6.12*	0.32
Fear								
Personal-related fear lev- els	390	2.3	1.0	390	1.9	0.8	-10.28*	0.54

Table 2: Descriptive statistics of dependent variables and results of Wilcoxon test

*Note.* \**p* < .001; \*\**z* score of the Wilcoxon Signed Ranks Test; \*\*\* Cohen's *d* effect size.

To determine whether students' self-reported responses changed, and if so, in what way, we conducted seven separate Wilcoxon signed-rank tests on each dependent variable. We found a significant difference between pre- and post-test in each variable. Specifically, results show that participants had a significant increase in statistical knowledge, historical knowledge, and perceived control, and a significant reduction in fear levels. In Table 2, we display the descriptive statistics for every dependent variable based on the two time points (pre- and post-test).

## 4.1 The impact on students' statistical knowledge

## 4.1.1 Number of victims in the Netherlands

To assess whether students' estimation of the number of victims from terrorist attacks would decrease after the workshop, we conducted a Wilcoxon signed-rank test. The outcome indicated that post-test scores (M = 934.0; SD = 15615.3) were significantly lower than pre-test scores (M = 504423.4; SD = 5811046.1), z = -14.80, p < .001, d = 0.87. For the number of victims on the pre-test the median was 700 and the mode was 1000, compared to a median of 6 and a mode of 6 on the post-test. To better interpret these findings, we visualized the distribution of the pre- and post-test answers in Figures 1 and 2. Student answers "I don't know" (N = 61) and unquantifiable answers such as "a lot" (N = 18) were excluded from Figure 1.



Figure 1: Bar chart with frequency distribution of number of victims in the Netherlands on the pre-test (*N* = 307)

This result shows that students overestimated the number of deaths due to terrorism in the Netherlands before the workshop and had a more realistic idea after the actual number was mentioned in the workshop. In the interviews, students provided three main reasons for why they overestimated the threat of terrorism in the Netherlands before the workshop. Firstly, students did so because they associated terrorism with large-scale attacks that kill hundreds of people. As described by a student: "When you think of a terrorist attack, you really immediately think of 9/11 size and not really of those [smaller] kinds of sizes." Secondly, students overestimated the threat because of the image the media and specifically "the internet" create of the threat of terrorism. For example, a student stated: "Terrorism is actually often quite a big topic in the media. Especially when it is close to the Netherlands or in the Netherlands. And you never remember the exact figures." Thirdly, some students had a very broad definition of terrorism before the workshop, including other forms of crime, leading them to overestimate the number of victims.

Figure 2: Bar chart with frequency distribution of number of victims in the Netherlands on the post-test (N = 379)



#### 4.1.2 Attacks worldwide

To evaluate students' knowledge on the frequency of attacks occurring worldwide, we conducted a Wilcoxon signed-rank test. The outcome indicated that post-test scores (M = 2.4; SD = 1.2) were significantly lower than pre-test scores (M = 3.7; SD = 0.9), z = -12.06, p < .001, d = 0.68. Overall, the students on average believed that terrorist attacks were increasing worldwide before the workshop. After participating in the workshop and gaining more knowledge on this topic, the majority of the students changed their opinions as on average they disagreed with this statement in the post-test.

During the interviews, the students explained why they initially thought the amount of terrorist attacks increased in three ways. First, some students pointed to the news in their explanations. As one student told us: "Of course, the most extraordinary makes the news, but [that's] just not very representative. As a result, I can imagine people (...) getting a false picture that there are a lot more attacks in a certain area." Second, some students thought that they believed terrorist violence increased because they encounter more images of it on social media and through messages than before, skewing their perception. Third, some students believed that terrorist violence increased worldwide because of various unsettling world events, such as climate protests, COVID-19 protests, US abortion law and high gas prices.

#### 4.2 The impact on students' historical knowledge

#### 4.2.1 The Waves Theory approach

To assess students' understanding of Rapoport's (2002) Waves Theory, we conducted a Wilcoxon signed-rank test. The results indicated that post-test scores (M = 4.1; SD = 1.2) were significantly higher than pre-test scores (M = 3.8; SD = 1.1), z = -4.35, p < .001, d = 0.23. Overall, these findings indicate that many students already believed that terrorism is more prevalent in some periods than others. Following the workshop, students demonstrated to have a slightly better understanding of the Waves Theory of terrorism.

During the interviews the students said that they were not familiar with the theory before the workshop, but found it very interesting. Students mentioned two things the history of terrorism teaches them. First, the theory helps to recognize patterns in the course of terrorist violence in the past. As a student mentioned: "You can just see how it went in the past, so then you can also see a bit of how it goes in the future, like with that wave motion. If you see that every time

it [terrorist wave] stops, then you can also assume it will stop again now." Second, students believed that we could learn from the historical trends of terrorist violence. A student explained: "The point of history is always to look at how they used to do it [fight terrorism] and how we should do it now. For example, [what we] could do differently now or do the same way as when things were going very well." As another student summed it up: "I think when you learn things about history, you learn things for the future."

### 4.2.2 Religious association

To assess the association between religion and terrorism we ran a Wilcoxon signed-rank test. The outcome indicated that post-test scores (M = 2.1; SD = 1.2) were significantly lower than pretest scores (M = 2.5; SD = 1.3), z = -4.21, p < .001, d = 0.22. Prior to the workshop, students on average did not believe that terrorism is always committed by people from a religious intention. After the workshop in which students learned about the prejudiced and incorrect association between terrorism and religion, students on average disagreed even more on this statement in the post-test.

During the interviews we found indications why some students changed their beliefs. Several students claimed that the most important lesson they learned from the workshop is that there have been different forms of terrorism over time, and that terrorism is not inherently religious or Islamic. As one student described: "When you learn about the history of terrorism, you learn that there is not a particular group that commits terrorism and not a particular kind of terrorism." To explain why students believed terrorists only had a religious motive before the workshop, students pointed to news coverage of attacks by religious terrorists (e.g., ISIS) and mentioned the emphasis media place on the ethnicity and/or religion of terrorists.

## 4.3 The impact on students' perceived control

### 4.3.1 Perceived control on the level of the individual

Students' individual perceived control significantly increased between pre- and post-test. The outcome of the Wilcoxon signed-rank test indicated that post-test scores (M = 3.0; SD = 1.2) were significantly higher than pre-test scores (M = 2.2; SD = 1.2), z = -8,23, p < .001, d = 0.46. Prior to the workshop, there was a certain level of disagreement among students on their ability to do something against terrorism and its impact. However, after the workshop students perceived more control over the threat of terrorism. To examine why students did or did not believe that they could play a role in countering terrorism and managing its impact before and after the workshop, we turn to the qualitative data from the explanatory open-ended questions of the survey.

# 4.3.1.1 Before the workshop: Reasons why students did (not) believe they could prevent terrorism and manage its impact themselves.

In the survey conducted before the workshop, students presented two types of reasons for why they believed they cannot prevent terrorism and manage its impact. Firstly, they believed they could not or did not want to take a role in countering terrorism (N = 185). Secondly, some students believed they cannot counteract terrorism because it is very or too difficult to stop terrorism from happening (N = 19), and specifically believed that terrorism as a phenomenon is far too big to prevent (N = 11).

The few students that believed they could do something about terrorism before the workshop mentioned raising awareness and knowledge (N = 13), talking to potential terrorists (N = 6), not participating in extremism or terrorism themselves (N = 6), and informing the police about suspicious events (N = 4). Ten students proposed helping people, like donating to victims, or as one student mentioned: "You can take good care of the people around you and make them feel that you are there for them. If everyone would do that, there would be fewer attacks, I think."

# 4.3.1.2 After the workshop: Reasons why students did (not) believe they could prevent terrorism and manage its impact themselves.

After the workshop, far more students indicated in the survey that they felt they were able to help prevent terrorism and manage its impact themselves. The students who still thought they could not help to counteract terrorism mainly used the same reasons as in the pre-test, but the number of students was lower. Only 98 students in the post-test believed they could not or did not want to have a role in countering terrorism, and ten students claimed it is too hard to counteract terrorism.

The students who did believe they can do something about terrorism after the workshop mainly highlighted the tips stressed in the workshop: do not give the terrorists the attention they seek (N = 71), do not be "unnecessarily" afraid of terrorism (N = 51), talk and learn about it (N = 14), and ensure less division (N = 7). The latter point is illustrated in the following quote: "Being kind to each other and accepting each other's opinions." Moreover, some students proposed informing the police about suspicious events (N = 7) and not participating in extremism or terrorism themselves (N = 11).

#### 4.3.2 Perceived control on the level of the police and security forces

To evaluate whether students perceived that police and security forces are able to prevent terrorism from happening in the Netherlands we performed a Wilcoxon signed-rank test. The outcome indicated that post-test scores (M = 3.9; SD = 1.0) were significantly higher than pre-test scores (M = 3.5; SD = 1.0), z = -6.12, p < .001, d = 0.32. This means that although students before the workshop on average believed that police and security forces are able to counter terrorism in the Netherlands, this belief increased significantly after the workshop.

# 4.3.2.1 Before the workshop: Reasons why students did (not) believe that the Dutch police and security forces could prevent terrorism.

According to the qualitative answers on the survey before the workshop, most students believed that terrorism cannot always be prevented (N = 111). They provided three reasons: 1) they thought the actions of the police and security forces can never make terrorism disappear completely (N = 66), 2) they assumed the police and security forces are limited in what they can and cannot do (N = 33), and 3) students believed that the ability of the police and security forces to prevent terrorism depends on the size of the attack and the number of terrorists (N = 12). Other students did not believe in the abilities of the police and security forces to prevent terrorism at all before the workshop (N = 44). This was mainly due to their belief that terrorism is too unpredictable to be prevented (N = 20).

The students who did believe the police and security forces are capable of stopping terrorism before the workshop primarily listed activities these forces (could) undertake (N = 105), such as monitoring potential suspects. Other students who indicated that the Dutch police and security forces are able to counter terrorism in the pre-test argued that this is their job and responsibility (N = 23), they have the power and influence to do it (N = 16), and they are trained to do so and therefore have the required knowledge and means for it (N = 13).

# 4.3.2.2 After the workshop: Reasons why students did (not) believe that the Dutch police and security forces could prevent terrorism.

After the workshop, still many students argued in the survey that terrorism can never be counteracted completely (N = 63). This was mainly explained by their belief that it is difficult for the police to be informed of every terrorist attack and arrive in time at the scene to prevent it from happening (N = 28). Only 15 students believed that police and security forces are totally unable to prevent terrorism after the workshop, mainly because of the unpredictability of terrorism.

In the post-test more students indicated that they believed the police and security services are capable of countering terrorism than in the pre-test. Firstly, 130 students listed actions such as monitoring suspicious activities (N = 54), preventive measures (N = 27), and infiltrating or going undercover (N = 16). Secondly, some students in the post-test still claimed that police and security forces have the power and influence to counter terrorism (N = 15), preventing terrorism is their job and responsibility (N = 14), and they are trained to do so and therefore have the required knowledge and means for it (N = 14).

Compared to the pre-test, a new explanation in the latter category was mentioned in the post-test: 15 students argued that police and security forces have proven their ability to counter terrorism in the past. In the interviews the accomplishments of Dutch counter-terrorism efforts stood out to some of the students as well: "It did surprise me that it [preventing attacks] apparently succeeds more often than it fails. I thought it would be the other way around."

### 4.4 The impact on personal-related fear levels

To investigate if students' fear of terrorism decreased after the workshop, we performed a Wilcoxon signed-rank test. We found that fear levels during the post-test (M = 1.9, SD = 0.8) were significantly lower than the pre-test scores (M = 2.3, SD = 1.0), z = -10.28, p < .001, d = 0.54. Fear levels significantly decreased after the workshop, although students on average reported they were not very afraid at the beginning of the workshop (M = 2.3). To better understand these quantitative results, we will use the qualitative data from the open-ended explanatory and evaluative question of the survey and the interviews.

### 4.4.1 Before the workshop: Reasons why students were (not) afraid.

In the survey before the workshop, students provided five reasons for why they were afraid of terrorism. The reason most frequently mentioned was that students found terrorism a scary and violent phenomenon (N = 23). Students were also afraid because they thought terrorism is unpredictable and cannot be counteracted (N = 14). Other students wrote that terrorist attacks are a realistic threat (N = 16) or could victimize themselves or people they know (N = 10). For example, a student wrote: "There are also many civilian casualties in attacks, so someone I know could someday be a victim of that as well." Lastly, students claimed that they were afraid of terrorism because of images in the news (N = 8).

We found five reasons why students were not afraid of terrorism. A group of students explained this by the assumption that terrorists would not target the places they live or attend regularly (N = 79). Others believed that terrorism does not take place very often (N = 38) or is far removed from their experience (N = 70), explaining their lack of fear thereof. As one student claimed: "It has never really felt close to me, it's kind of otherworldly." Some students mentioned not being afraid of terrorism because they were not concerned about terrorism or felt safe (N = 54). Finally, some students said that being afraid of terrorism is useless (N = 19). As one student wrote: "When I'm afraid I'm in my own prison."

## 4.4.2 After the workshop: Reasons why students were (not) afraid.

In the survey after the workshop, some students indicated that they were still (slightly) afraid of terrorism, and they primarily attributed this to the fact that terrorism is a small but realistic threat (N = 20), and it is still a scary phenomenon (N = 14). As one student put it: "It [being vic-timized by terrorism] is not very likely, but it could still happen to you."

Far more students indicated in the post-test that they were not or no longer afraid because – as TerInfo's workshop emphasizes – the threat of terrorism is not as great as they imagined it to be. Most students explained that they were not afraid of terrorism after the workshop because the probability of an attack and becoming victimized by it are small (N = 105), terrorism does not occur in their surroundings (N = 99), and the number of attacks is declining (N = 15).

Furthermore, we found in the interviews and evaluative question that according to the students the workshop in general, or certain aspects of it, helped diminish their fear levels. First, and in line with the findings from the survey, the students often mentioned statistics on the actual threat of terrorism that were taught in the workshop. Students claimed that these numbers reassured them, because they made them realize that the threat of terrorism is smaller than they imagined it to be. Especially the actual number of terrorist attacks made students less afraid. As one student said:

You know, you hear all kinds of things on the news, for example, and then you think, yes, that all sounds very intense. But when you then learn on the other hand that there have only been six deaths in total [in the Netherlands since 2000], (...) that does make you less worried. That makes the shock fade away, actually.

Another student told us that the numbers showed her that: "Despite some of the things that happen, the Netherlands is actually quite a safe country." The fact that the number of terrorist attacks is decreasing was also mentioned as a reason for students being less afraid of terrorism.

As one student described: "I didn't know [before the workshop] that it [the number of attacks] goes down a lot, which was actually quite nice. (...) When you see figures like this, you might find it much less scary."

Second, students mentioned how the history of terrorism and the Waves Theory approach helped them put terrorism into perspective, which made them less afraid: "Of course it [learning about the history of terrorism] is important. Because if you learn a little bit about how and what works, it makes you feel more secure." Third, some students mentioned they were less afraid of terrorism after the workshop because they learned that the police and security forces have already successfully prevented several attacks in the Netherlands.

## **5** Discussion

### 5.1 Discussion of results

In this paper, we examined to what extent our historicizing pedagogy could help reduce students' fear of terrorism, providing three different types of knowledge (factual information about the threat of terrorism, historical knowledge concerning terrorism, and knowledge to help students gain a sense of control over the threat of terrorism). We explored this by investigating the effects of TerInfo's workshop "What is terrorism?" on Dutch secondary education students. Although our statistical analysis was exploratory in nature, the quantitative findings nonetheless showed considerable effect sizes. After the workshop, students demonstrated increased knowledge of the actual threat and history of terrorism, perceived greater control over terrorism, and reported reduced fear levels. The qualitative findings suggest that the students' decreased fear of terrorism after the workshop stemmed from learning that the threat of terrorism was less severe than imagined (statistical information), being better equipped to put terrorism into a historical framework (historical knowledge), and recognizing police and security forces' past successes in preventing attacks (perceived control). This aligns with prior studies that show that students who received education on terrorism reported decreased fear levels and threat perception (Fischer et al., 2011; Krause et al., 2022). These results are hopeful, and we can cautiously conclude that the workshop is beneficial to decrease fear of terrorism among secondary education students and that history teachers could benefit from our design principles.

Several findings stand out when comparing the insights of this study with prior research. First, although students were significantly less afraid after the workshop, they were less afraid of terrorism before the workshop than might be expected from previous research (Comer et al., 2008). This could be due to the study's timing: it was conducted in a relatively calm period with no terrorist attacks in the Netherlands or surrounding countries. The students in our sample primarily experienced terrorism indirectly and attributed their absence of fear to their belief that terrorist attacks happen far away from their daily lives and not in their immediate vicinity. This aligns with research indicating that people in close proximity to terrorist attacks generally perceive a heightened threat and an increased sense of vulnerability compared to those experiencing it indirectly (Avdan & Webb, 2019).

Second, despite a global decrease in attacks (Institute for Economics & Peace, 2022), students highly overestimated the threat of terrorism before the workshop, as seen in Figure 1. The highly differentiated results on the pre-test showed a median estimate of 700 and a mode of 1000 victims of terrorist attacks in the Netherlands. Students attributed their overestimation to associating terrorism with largescale, highly publicized attacks with numerous victims. This aligns with studies that state that media exposure primarily effects heightened risk perceptions and excessive caution for safety (Nellis & Savage, 2012; Rubaltelli et al., 2018). Moreover, contrary to what might be expected from previous research (Comer et al., 2008), the students' clear overestimation of terrorism seemed to be unrelated to more fear as students in the pre-test on average were relatively unafraid of terrorism. The historicizing workshop provided students with factual information on terrorism victims in the Netherlands and the frequency of attacks worldwide. We found the largest effect sizes for the two statistical knowledge items, indicating that students gained a better understanding of the small chance of being involved in an attack. For example, after the workshop 89% of the students now correctly reported the number of six victims of terrorist attacks in the Netherlands (Figure 2). Third, before the workshop, students on average already had a general idea that terrorism is not inherently religious, and that terrorist violence waxes and wanes. The Waves Theory aligned with their intuitions, but students still seemed to lack a coherent framework to make sense of terrorism. It appears that the lessons from the Waves Theory helped students contextualize terrorist attacks historically. Some students noted that the Waves Theory helped them to recognize patterns in the course of past terrorist violence and relate to these patterns from their own perspectives. In short, our approach suggests that by historicizing terrorism, students improved their ability to connect the past, present, and future, recognizing terrorism as an evolving historical phenomenon. Moreover, we have some indications that this approach helped students reflect on their own temporal positioning and realize they have agency in the continuous process of meaning making (Rüsen, 1989; Van Straaten et al., 2016; Wansink & De Graaf, 2019). We also acknowledge that such goals are very difficult to achieve in one workshop. Still, we think our findings are relevant for history education, as our historicizing pedagogy helps students to better understand current events, and provide students with a framework to gain better grip in a world that is constantly changing.

Fourth, we found that students perceived more control over the threat of terrorism after attending the workshop, both at the level of the individual and of the police and security forces. These findings might suggest that demonstrating the roles individuals and police and security forces can play – and have played – in combatting terrorism can enhance students' sense of control. Previous studies showed that a high level of perceived control restores a sense of security and stability, which in turn helps people to manage threatening situations such as terrorist attacks (Greenaway et al., 2014). As a result, we hope that the knowledge they received in the workshop and their increased sense of control will help students cope with potential future attacks.

Lastly, previous research has shown that improving knowledge, specifically teaching students about the rationale behind terrorism, can help reduce terrorism-induced fear and increase their well-being (Fischer et al., 2011, Krause et al., 2022). Our quantitative results show that the work-shop significantly improved students' historical and statistical knowledge, with the largest effect sizes observed for the latter. Our qualitative results provide indications to assume that three other types of knowledge (i.e., statistical knowledge, historical knowledge, and knowledge to help students gain a sense of control over the threat of terrorism) can have a beneficial effect on reducing fear. When a disruptive event such as a terrorist attack occurs, and minors are overwhelmed by gruesome images and news items on social media, our historicizing approach with these three types of knowledge can provide an interpretative framework for students to situate themselves better in time and space, and to restore coherence and meaning to disruptive, sometimes seemingly inexplicable events (Wansink et al., 2021). A knowledge-driven historicizing approach can help students to interpret the present and make students more resilient against unfiltered social media feeds.

### 5.2 Limitations & future research

First, we chose to apply the workshop and test its effects in multiple schools and classrooms, preferring a natural setting over a (semi-)controlled environment. We think the ecological validity of this study benefited from this approach. However, a limitation is a relatively high attrition rate of students who did not fill in the post-survey due to practical circumstances in the school settings (e.g., absentees or being inadvertently overlooked by staff members).

Second, we used a mixed-method approach combining quantitative and qualitative data to grasp and interpret the effects of the workshop on students' understanding and fear of terrorism. This approach yielded several relevant insights, but our evaluative approach entails that the results should be interpreted with these limitations in mind. To draw stronger conclusions about causal and moderation effects, a different research design is needed. A multilevel approach to control for the clustering of data would improve the research design and the generalizability of our conclusions. In addition, adding a delayed treatment control group would also reduce potential bias and further increase the validity and generalizability of our results, and also ensure that the students in the control group experience the benefits we found in our explorative approach.

Third, we measured some variables with a single-item scale that were not yet operationalized in previous research, such as historical knowledge on terrorism. We tailored several existing scales and constructs to comprehensible items for our target group and context following a pilot and expert advice. However, optimizing the survey constructs (e.g., multi-item scale) in future research would increase the reliability of the measurement across contexts and, furthermore, contribute to understanding the causal relationship between the three types of knowledge we studied and a possible decrease in fear of terrorism. For example, the students participating in this study differentiated between personal-related and societal-related fear (Al-Badayneh et al., 2011; Comer et al., 2008), but we were only able to measure personal-related fear in a reliable way. For history education research it is important to demystify the black box on how students orient themselves in time and place, what this means in terms of resilience, and how to best research this.

Furthermore, it is important to note that the present study is carried out within the Dutch context, where terrorist violence occurs on a small scale, especially in the timeframe of the study. This makes our findings context specific. Our workshop could be helpful to students in the Dutch context to decrease fear, but possibly less so in countries in which the terrorist threat is higher. Previous research shows that children living in these areas develop a different perception of threat (Sharlin et al., 2006). Even within the Dutch context, whether the workshop is effective may depend on the composition of the study population. For example, characteristics such as trauma and religious background may affect how minors respond to the workshop (e.g., Andersen & Mayerl, 2018). Since our research sample was not very diverse in terms of religious and ethnic backgrounds, future research should try to collect more diverse student samples to identify whether these three types of knowledge would work in different contexts and with specific groups that could be marginalized by teaching terrorism (e.g., Muslim or traumatized students) or if other elements would be more effective.

### **5.3 Implications**

Terrorism is a challenging, yet necessary topic of discussion among secondary education students. The results regarding our historicizing approach are promising and provide important insights on how to structure and facilitate conversations about disruptive events, such as terrorist attacks in history education. We hope that other researchers and teachers use our design principles to develop other workshops about sensitive topics and investigate these. It would be interesting to find out if students benefit from placing topics such as riots and political upheaval in larger historical frameworks (e.g., Van Straaten et al., 2019). Finally, we propose that a historicizing pedagogy can both challenge terrorists' aim of sowing fear and panic amongst the population and provide students with clues and cues to "deal" with terrorism as a rational, and even manageable, problem in time and space.

## Supplemental materials

The following Supplemental Materials referenced in the article are online available at <a href="https://doi.org/10.34894/SAY8JD">https://doi.org/10.34894/SAY8JD</a> (Bammens et al., 2025).

- Table S1
- Interview protocol and topic list
- Audit trail report
- Workshop materials translated in English

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## References

- Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2008). Auditing quality of research in social sciences. *Quality & Quantity*, 42(2), 257–274. <u>https://doi.org/10.1007/s11135-006-9044-4</u>
- Al-Badayneh, D. M., Al-Khattar, A., & Al Hasan, K. (2011). Fearing future terrorism: Perceived personal, national, regional and international threats of terrorism. In S. Ekici (Ed.), *Counter Terrorism in Diverse Communities* (pp. 30–44). IOS Press. <u>http://ebooks.iospress.nl/publication/25655</u>
- Andersen, H. & Mayerl, J. (2018). Attitudes towards Muslims and fear of terrorism. *Ethnic and Racial Studies*, 41(15), 2634–2655. <u>http://dx.doi.org/10.1080/01419870.2017.1413200</u>
- Avdan, N. & Webb, C. (2019). Not in my back yard: Public perceptions and terrorism. *Political Research Quarterly*, 72(1), 90–103. <u>https://doi.org/10.1177/1065912918776118</u>

Boeije, H. (2010). Analysis in qualitative research. SAGE. https://doi.org/10.5785/26-2-24

Braithwaite, A. (2013). The logic of public fear in terrorism and counter-terrorism. Journal of Police and Criminal Psychology, 28, 95–101. <u>https://doi.org/10.1007/s11896-013-9126-x</u>

- Comer, J. S. & Kendall, P. C. (2007). Terrorism: The psychological impact on youth. *Clinical Psychology: Science and Practice*, 14(3), 179–212. <u>https://doi.org/10.1111/j.1468-2850.2007.00078.x</u>
- Comer, J. S., Furr, J. M., Beidas, R. S., Weiner, C. L., & Kendall, P. C. (2008). Children and terrorismrelated news: Training parents in coping and media literacy. *Journal of Consulting and Clinical Psychology*, 76(4), 568–578. <u>https://doi.org/10.1037/0022-006X.76.4.568</u>

De Graaf, B. (2021). Radicale verlossing. Prometheus.

- Fernández-Gómez, E., Martín-Salvador, A., Luque-Vara, T., Sánchez-Ojeda, M. A., Navarro-Prado, S., & Enrique-Mirón, C. (2020). Content validation through expert judgement of an instrument on the nutritional knowledge, beliefs, and habits of pregnant women. *Nutrients*, 12(4), 1136. <u>https://doi.org/10.3390/nu12041136</u>
- Fischer, P., Postmes, T., Koeppl, J., Conway, L., & Fredriksson, T. (2011). The meaning of collective terrorist threat: Understanding the subjective causes of terrorism reduces its negative psychological impact. *Journal of Interpersonal Violence, 26*(7), 1432–1445. <u>https://doi.org/10.1177/0886260510369137</u>
- Goldberg, T. & Savenije, G. M. (2018). Teaching controversial historical issues. In S. A. Metzger & L. M. Harris (Eds.), The Wiley international handbook of history teaching and learning (pp. 503–526). <a href="https://doi.org/10.1002/9781119100812.ch19">https://doi.org/10.1002/9781119100812.ch19</a>
- Greenaway, K. H., Louis, W. R., Hornsey, M. J., & Jones, J. M. (2014). Perceived control qualifies the effects of threat on prejudice. *British Journal of Social Psychology*, 53(3), 422–442. <u>https://doi.org/10.1111/bjso.12049</u>
- Gurwitch, R. H., Sitterle, K. A., Young, B. H., & Pfefferbaum, B. (2002). The aftermath of terrorism. In A. M. La Greca, W. K. Silverman, E. M. Vernberg, & M. C. Roberts (Eds.), *Helping children cope with disasters and terrorism* (pp. 327–357). American Psychological Association. <u>https://doi.org/10.1037/10454-014</u>
- Halperin, E., Porat, R., Tamir, M., & Gross, J. J. (2013). Can emotion regulation change political attitudes in intractable conflicts? From the laboratory to the field. *Psychological Science*, 24(1), 106–111. <u>https://doi.org/10.1177/0956797612452572</u>
- Huddy, L., Feldman, S., Capelos, T., & Provost, C. (2002). The consequences of terrorism: Disentangling the effects of personal and national threat. *Political Psychology*, 23(3), 485–509. <u>https://doi.org/10.1111/0162-895X.00295</u>
- Institute for Economics & Peace. (2022). Global terrorism index 2022: Measuring the impact of terrorism. <u>http://visionofhumanity.org/resources</u>
- Kar, N. (2019). Depression in youth exposed to disasters, terrorism and political violence. *Current Psychiatry Reports*, 21(8), 1–11. <u>https://doi.org/10.1007/s11920-019-1061-9</u>
- Kearns, E. M., Betus, A. E., & Lemieux, A. F. (2021). When data do not matter: Exploring public perceptions of terrorism. Studies in Conflict & Terrorism, 44(4), 285–309. <u>https://doi.org/10.1 080/1057610X.2018.1543145</u>
- Krause, P., Gustafson, D., Theriault, J., & Young, L. (2022). Knowing is half the battle: How education decreases the fear of terrorism. *Journal of Conflict Resolution*, 66(7–8), 1147–1173. <u>https://doi.org/10.1177/00220027221079648</u>
- Kule, A., Demir, M., Ekici, N., & Akdogan, H. (2021). Perceptions of generation Z regarding terrorism: A cross-regional study. Studies in Conflict & Terrorism, 46(10), 2011–2037. <u>https://doi.or</u> g/10.1080/1057610X.2021.1894737
- Lenhard, W. & Lenhard, A. (2016). Computation of effect sizes. Psychometrica. <u>https://doi.org/10.13140/RG.2.2.17823.92329</u>
- Miles, M. B. & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. SAGE.
- Mosborg, S. (2002). Speaking of history: How adolescents use their knowledge of history in reading the daily news. *Cognition and instruction*, 20(3), 323–358. <u>https://doi.org/10.1207/</u>S1532690XCl2003\_2
- Nellis, A. M. & Savage, J. (2012). Does watching the news affect fear of terrorism? The importance of media exposure on terrorism fear. *Crime & Delinquency, 58*(5), 748–768. <u>https://doi.org/10.1177/0011128712452961</u>
- Parker, T. & Sitter, N. (2016). The four horsemen of terrorism: It's not waves, it's strains. *Terrorism and Political Violence*, 28(2), 197–216. <u>https://doi.org/10.1080/09546553.2015.1112277</u>
- Pfefferbaum, B., Nixon, S. J., Tivis, R. D., Doughty, D. E., Pynoos, R. S., Gurwitch, R. H., & Foy, D. W. (2001). Television exposure in children after a terrorist incident. *Psychiatry: Interpersonal* and Biological Processes, 64(3), 202–211. <u>https://doi.org/10.1521/psyc.64.3.202.18462</u>
- Pfefferbaum, B., Pfefferbaum, R. L., Gurwitch, R. H., Nagumalli, S., Brandt, E. N., Robertson, M. J., Aceska, A., & Saste, V. S. (2003). Children's response to terrorism: A critical review of the literature. *Current Psychiatry Reports*, 5(2), 95–100. <u>https://doi.org/10.1007/s11920-003-0025-1</u>

Rapoport, D. C. (2002). The four waves of rebel terror and September 11. Anthropoetics, 8(1), 1–11.

- Rubaltelli, E., Scrimin, S., Moscardino, U., Priolo, G., & Buodo, G. (2018). Media exposure to terrorism and people's risk perception: The role of environmental sensitivity and psycho-physiological response to stress. *British Journal of Psychology*, 109(4), 656–673. <u>https://doi.org/10.1111/bjop.12292</u>
- Rüsen, J. (1989). The development of narrative competence in historical learning An ontogenetic hypothesis concerning moral consciousness. *History and Memory*, 1(2), 35–59. <u>https://www.jstor.org/stable/25618580</u>
- Sharlin, S. A., Moin, V., & Yahav, R. (2006). When disaster becomes commonplace: Reaction of children and adolescents to prolonged terrorist attacks in Israel. *Social Work in Health Care*, 43(2–3), 95–114. <u>https://doi.org/10.1300/J010v43n02\_07</u>
- Sjøen, M. M. (2023). Taking the "terror" out of "terrorism": The promise and potential of fear reducing education. *Journal of Social Science Education*, 22(1), 2-23. <u>https://doi.org/10.11576/jsse-5360</u>
- Skøt, L., Nielsen, J. B., & Leppin, A. (2021). Risk perception and support for security measures: Interactive effects of media exposure to terrorism and prior life stress? *Journal of Risk Research*, 24(2), 228–246. <u>https://doi.org/10.1080/13669877.2020.1750460</u>
- Theriault, J., Krause, P., & Young, L. (2017). Know thy enemy: Education about terrorism improves social attitudes toward terrorists. *Journal of Experimental Psychology: General*, 146(3), 305–317. <u>https://doi.org/10.1037/xge0000261</u>
- Van der Does, R., Kantorowicz, J., Kuipers, S., & Liem, M. (2021). Does terrorism dominate citizens' hearts or minds? The relationship between fear of terrorism and trust in government. *Terrorism and Political Violence*, 33(6), 1276–1294. <u>https://doi.org/10.1080/09546553.2019.1608951</u>
- Van Overmeire, R., Six, S., Vesentini, L., Deschepper, R., Denys, E., Vandekerckhove, M., & Bilsen, J. (2020). Questions and emotions of minors after terrorist attacks: A qualitative study using data from a Belgian youth-helpline. *Community Mental Health Journal*, 56(2), 280–286. https://doi.org/10.1007/s10597-019-00482-w
- Van Straaten, D., Wilschut, A., & Oostdam, R. (2016). Making history relevant to students by connecting past, present and future: A framework for research. *Journal of Curriculum Studies*, 48(4), 479–502. <u>https://doi.org/10.1080/00220272.2015.1089938</u>
- Van Straaten, D., Wilschut, A., Oostdam, R., & Fukkink, R. (2019). Fostering students' appraisals of the relevance of history by comparing analogous cases of an enduring human issue: A quasi-experimental study. *Cognition and Instruction*, *37*(4), 512–533. <u>https://doi.org/10.1080/07370008.2019.1614590</u>
- Vleeskens, M., Bammens, M., Herinx, M., & Wansink, B. (2023). Boze mensen en bivakmutsen. Didactief Online.
- Wansink, B. G. J. & De Graaf, B. A. (2019). Terrorisme bespreken in de klas. Kleio, 6, 40–43.
- Wansink, B., De Graaf, B., & Berghuis, E. (2021). Teaching under attack: The dilemmas, goals, and practices of upper-elementary school teachers when dealing with terrorism in class. *Theory* & *Research in Social Education*, 1–21. <u>https://doi.org/10.1080/00933104.2021.1920523</u>
- Willis, G. B. & Artino, A. R. (2013). What do our respondents think we're asking? Using cognitive interviewing to improve medical education surveys. *Journal of Graduate Medical Education*, 5(3), 353–356. <u>https://doi.org/10.4300/JGME-D-13-00154.1</u>
- Zeidner, M. (2005). Contextual and personal predictors of adaptive outcomes under terror attack: The case of Israeli adolescents. *Journal of Youth and Adolescence*, 34(5), 459–470. <u>https://doi.org/10.1007/s10964-005-7263-y</u>