Fear of terrorism and attitudes toward refugees:

An empirical test of group threat theory

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Abstract: In recent years, the co-occurrence of the migration crisis and terrorist attacks in European cities have created a strong link between refugees and asylum seekers and terrorism in the minds of many Europeans. This study investigates how attitudes towards refugees are associated with fear of terrorism. Using multilevel modelling on 1,500 Belgian citizens nested in 402 municipalities, results indicate that positive attitudes towards refugees are associated with lower terrorism fear. Adverse economic conditions at both the individual and municipal level are associated with greater fear of terrorism, while a large outgroup size is associated with lower fear of terrorism. Women hold greater fear than men, while commercial news consumption is associated with greater terrorism fears.

Keywords: fear of terror, terrorism, group threat, media, attitudes towards refugees, outgroup size, economic conditions

Introduction

Over the past years, Western European countries have had to deal with high numbers of asylum seekers and refugees from war-torn countries in the Middle East and Africa. This influx has presented challenges at the local, national and supranational level, particularly with regards to refugee and asylum seeker settlement and integration, with discussions becoming increasingly politicized and contentious (De Coninck 2020; Lucassen 2017; Zorlu 2017). Intergroup tensions in several of these countries were also exacerbated by terrorist attacks such as the Manchester Arena bombing in May 2017, the Brussels subway and airport bombings in March 2016, and the Nice transport truck attack in July 2016. These attacks were often attributed to Islamic extremists who were suspected – but rarely proven – to have entered Europe undetected among the large flow of asylum seekers and refugees (Lucassen 2017). As a result, these terrorist attacks and the socio-political and media climate in Europe have created a link between refugees and asylum seeker arrival and terrorist attacks in the minds of many Europeans (Andersen and Mayerl 2018; Lucassen 2017; Marfouk 2019). In this regard, terrorism is a large concern of European citizens. Recent Eurobarometer results (2019) indicate that Europeans consider terrorism to be their third largest concern, following immigration and climate change. Given that refugee flows into Europe are unlikely to diminish in the future, with the UNHCR confirming more people were displaced in 2018 than ever before due to, amongst others, climate change and armed conflicts (UNHCR 2019), it is relevant to ask how fear of terrorism in Europe is related to negative attitudes towards refugees – thereby combining insights on two top concerns of Europeans[1].

There have been numerous studies that investigate fear of terrorism, but these either

[1] Although shifts in these concerns are likely to occur due to the COVID-19 pandemic, with health and economic concerns potentially becoming more important, no data on this is currently available.

exclusively look at individual determinants of fear (Andersen and Mayerl 2018; Elmas 2020; Haner et al. 2019; Sloan et al. 2020) or are theoretical or use qualitative methods (Ahmed 2015; Makarenko and Mesquita 2014; Rytter and Pedersen 2013). In many of these studies, the vulnerability perspective, which is often used to explain dynamics of fear of crime, is used to explain fear of terrorism (Sloan et al. 2020). This crime-terror nexus has recently come under increased scrutiny, with Anderson and Mayerl (2018) finding empirical evidence for the assumption that terrorism fear is distinctly different from fear of crime, and instead relates to attitudes towards outgroups – in case of their study, Muslims. They argue that reactions to terrorism must be understood in the broader socio-political and mediatized context in which these attacks occur (Andersen and Mayerl 2018; Nellis and Savage 2012). With this in mind, the interconnection between terrorism and the European refugee crisis provides a theoretical and societal context in which fear of terrorism may be explained by frameworks that explain outgroup attitudes in general (Andersen and Mayerl 2018). Furthermore, the crime-terror nexus provides no potential explanations for fear at the contextual level, instead exclusively focusing on individual factors. The lack of studies considering contextual factors of fear of terror is a vital caveat in the literature which should not be overlooked. Many studies of outgroup attitudes and prejudice have shown that both individual (age, gender, socioeconomic status (SES), etc.) and contextual factors, like economic conditions and outgroup size, provide complementary insights into attitudes towards outgroups (Heizmann and Ziller 2020; Hjerm 2009; Lubbers, Coenders and Scheepers 2006; Sarrasin et al. 2012; Schlueter and Davidov 2013; Van Hootegem, Meuleman and Abts 2020).

This study contributes to the literature by investigating how fear of terrorism is shaped within the socio-economic context of a Western European country (Belgium), and how existing theoretical frameworks that explain outgroup attitudes may also apply to this fear. I consider the impact of cross-municipal differences in the economic and refugee context as well as

individual-level mechanisms that shape fear of terrorism. To do so, I analyzed cross-sectional representative data from an online survey among the adult population of Belgium in 2017 (N = 1,500), nested in 402 municipalities, by means of multilevel analysis (Hox 2002; Snijders and Bosker 1999).

The site of this study is Belgium. The centre-right-wing government in Belgium at the time of the European migration crisis responded to the refugee crisis in an ambivalent way. While the political discourse regarding the large influx of refugees was generally negative, actual reception policies did not reflect this harsh stance and were comparable to policies of the previous – liberal – government. None the less, the increase in asylum application between 2014 and 2016 was considerable and required action, illustrated by a sharp increase in asylum seeker centres and relocation policies to alleviate the burden on urban centres like Brussels and Antwerp (De Cleen et al. 2017; Puschmann et al. 2019). Belgium was also affected by a large-scale terrorist attack. On March 22, 2016, Islamic extremists bombed Belgium's national airport and a subway station in Brussels, resulting in 35 casualties and over 300 people injured. This attack and the heightened fear of terrorism in the following weeks and months further contributed to the polarization of public opinion towards refugees in Belgium. In subsequent election cycles, migration was a key theme that explains the electoral success of the populist right-wing Flemish party Vlaams Belang (De Cleen et al. 2017). These conditions ensure that Belgium represents a national setting that is well-suited to examine fear of terrorism.

Shifting fear of terrorism from perceived vulnerability to group threat theory

Traditionally, the study of fear of terrorism is closely intertwined with the investigation of fear of crime. Most studies in this field depart from the vulnerability perspective (Haner et al. 2019; Nellis 2009). This perspective contends "that fear of crime is greater among individuals, who, by their personal characteristics, are believed to be at greater risk for victimization than others"

(Sloan et al. 2020, p. 4). Two prominent vulnerability indicators at the individual level are gender and age: elderly individuals and women express greater fear of crime and terrorism than younger individuals and men (Lane et al. 2014; Nellis 2009), despite a low risk of victimization. In this vulnerability context, explanations for these effects suggest that these group differences are stimulated by a greater fear of sexual assault (Fisher and Sloan 2003), or physical assault in general (Hirtenlehner and Farrall 2014). Cultural factors also play a role, as studies have found that individuals with low SES report greater fears than those with a high SES – but evidence on this is less clear than it is for age and gender (Lane et al. 2014; Sloan et al. 2020; Wu, Klahm IV and Atoui 2017). Furthermore, cultural distance may also play a role, as Wu et al. (2017) found that Arab Americans hold a greater fear of crime than non-Arab Americans – but not necessarily due to a greater fear of racially motivated crimes. Specifically for fear of terrorism, Haner et al. (2019) found that Christians, and in particular those who perceive themselves as 'strong' Christians, report greater fear than those who do not identify as Christian. In recent years, an increasingly popular line of inquiry also shows that consuming news media stimulates terrorism fears (Elmas 2020; Nellis and Savage 2012; Williamson, Fay and Miles-Johnson 2019): Williamson et al. (2019) have shown that frequent media consumers are those that are most fearful of violent crimes and terrorism. However, news media are heterogenous and differ in the way that they frame and report on salient topics like terrorism and immigration. For example, Jacobs, Meeusen and d'Haenens (2016) found in their content analyse of Flemish television news that "despite an overall negativity bias and relative homogeneity between the broadcasters, commercial news contains slightly more sensational and tabloid characteristics than public news. The latter promotes a more balanced view of immigration" (p. 642). These different representations are also reflected in the minds and attitudes of individuals, as commercial news audiences tend to hold more negative outgroup attitudes than public news audiences (De Coninck, Rodríguez-de-Dios and d'Haenens 2020;

Jacobs et al. 2016).

Despite the widespread use of the fear of crime framework to explain terrorism fear, there is growing criticism on this interconnection (Elmas 2020; Freilich and LaFree 2015; Makarenko and Mesquita 2014). Andersen and Mayerl (2018) found that none of the main vulnerably factors they examined (age, gender, SES) were associated with fear of terrorism in their study of a representative sample of adult residents of the city of Kaiserslautern, Germany. Instead, they found that attitudes towards Muslims were more strongly associated with fear of terrorism than vulnerability indicators. They suggest that fear of terrorism is distinctly different from fear of crime, and that the "indiscriminate and seemingly random nature of terrorism means the fear of crime-related variables lack explanatory power" (Andersen and Mayerl 2018, p. 2638). Furthermore, they believe that "previously observed relationships between the vulnerability and fear of terrorism […] are in fact spurious in the sense that predictors of fear of crime are likely shared by attitudes towards Muslims" (Andersen and Mayerl 2018, p. 2638). Older and lower educated individuals are not only more fearful of crime and terrorism but have also been found to hold more negative attitudes towards outgroups (e.g., refugees, Muslims) (De Coninck 2020; Marfouk 2019). By failing to take outgroup attitudes into account, the vulnerability perspective makes it seem like these demographic or individual characteristics are directly (and exclusively) responsible for fear. The authors therefore emphasize that the current socio-political climate and public perceptions of outgroups must also be considered in the investigation of fear of terrorism (Andersen and Mayerl 2018; Sloan et al. 2020). Despite their novel theoretical approach and findings regarding fear of terrorism, the study was limited in its geographical scope and therefore requires further investigation.

Individual and contextual determinants of group threat theory

If we follow the assumption that predictors of attitudes towards outgroups are likely shared by

fear of terrorism, then existing theoretical frameworks that explain such attitudes may also apply to fear of terrorism. One key framework in this regard is group threat theory (Hjerm 2007; Stephan et al. 2009). It describes a process in which intergroup relations are conflictual in nature (Jacobs, Boukes and Vliegenthart 2019), and that the diverse economic, cultural, and political interests of different groups generate perceived conflicts or threats between groups which in turn generate negative outgroup attitudes (Hjerm 2007). In most studies, symbolic and realistic threats are distinguished. Symbolic threat arises because of different value orientations between the in- and outgroup, and a potential reluctance of the outgroup to adhere to the (cultural) standards of the host society. Realistic threats often consist of two components: perceived threats to the ingroups economic or material interests, and perceived threats to the ingroups psychical well-being (e.g. fear of crime) (Ata et al. 2009; Jacobs et al. 2019; Stephan et al. 2009). In this sense, fear of crime is already a conceptual part of group threat theory, which strengthens my assumption that this theory may also be used to explain associations with fear of terrorism.

These perceived conflicts or threats are associated with a host of individual and contextual factors (Stephan et al. 2009). For instance, von Hermanni and Neumann (2019) found that crime, economic and fiscal concerns have a negative impact on the acceptance of refugees seeking asylum, while others have found that different value orientations between the majority and minority group is a major source of perceived threat, and thus also of prejudice (Ata et al. 2009; De Coninck et al. 2020). In general, this prejudice is more pronounced among individuals in more precarious socio-economic positions, such as people with fewer work skills or less education (De Coninck et al. 2020), or in regions with adverse economic conditions or with a large outgroup size (Heizmann and Ziller 2020; Hjerm 2009; Lubbers et al. 2006; Sarrasin et al. 2012; Schlueter and Davidov 2013; Van Hootegem et al. 2020). Thus, to explain variations in fear of terrorism, it seems particularly adequate to consider characteristics of the

contexts in which intergroup relations take place.

The current study

In an effort to build on Andersen and Mayerl's (2018) findings regarding outgroup attitudes and fear of terrorism, I examine associations between contextual (outgroup size, economic conditions) and individual factors commonly associated with group threat theory (age, gender, SES, religious affiliation, migration background, individual attitudes towards refugees, news media consumption), and fear of terrorism in a representative sample of the Belgian adult population. In doing so, I relate dynamics of fear of terrorism to group threat theory, thereby providing an alternative or addition to the often-used – but increasingly scrutinized – vulnerability perspective (Elmas 2020; Haner et al. 2019; Sloan et al. 2020).

The first hypothesis will test if the eventual 'outcome' of group threat (attitudes towards refugees) is associated with fear of terrorism. Following Andersen and Mayerl's (2018) findings, I expect the following:

H1: Positive attitudes towards refugees are associated with lower fear of terrorism.

A second set of hypotheses will formulate expectations regarding individual determinants of fear of terrorism, either in line with group threat and/or the vulnerability perspective. Given the ambiguous findings regarding gender in studies applying group threat theory (Jacobs et al. 2019; Stephan et al. 2009), but a clear and often-replicated finding when reviewing studies using the vulnerability perspective (Haner et al. 2019; Lane et al. 2014; Sloan et al. 2020), I expect that women report greater fear of terrorism than men, likely stimulated by their greater fear of sexual assault (Fisher and Sloan 2003) or physical assault (Hirtenlehner and Farrall 2014). The same pattern presents itself for elderly people but is also supported by insights from group threat theory: studies have shown that older people are consistently more prejudiced towards outgroups and fearful of crime or terrorism than young people (De Coninck

2020; Marfouk 2019; Sloan et al. 2020).

H2: Women report greater fear of terrorism than men.

H3: Older respondents report greater fear of terrorism than younger respondents.

Thirdly, I consider the role of cultural factors in shaping fear of terrorism. In their study of public terrorism concerns, Haner et al. (2019) found that Christian religiosity stimulates fear of terrorism. They explain this by suggesting that strength of group identification increases fear of the out-group, which may be true for individuals with strong Christian religious identities in particular because media and several political actors have encouraged a culture of fear of Islam over the past few years (Haner et al. 2019; Lucassen 2017). I expect the following:

H4: Christians report greater fear of terrorism than non-Christians.

H5: Religiosity will be positively associated with fear of terrorism.

In addition to religion, I also expect that economic (or SES) factors at the individual level play a role. Although there is some evidence from studies applying the vulnerability perspective that individuals with low SES report greater fears than those with a high SES (Sloan et al. 2020), others found a weak to no relation. However, group threat theory has a strong foundation in explaining outgroup attitudes through individual economic or status indicators, with those with high SES (often operationalized as either the (perceived) financial situation or educational attainment) experience lower realistic and symbolic threat from outgroups, resulting in more positive attitudes (Jacobs et al. 2019; Marfouk 2019; Van Hootegem et al. 2020). With this in mind, we expect the following:

H6: Lower educated individuals report greater fear of terrorism than higher educated individuals.

H7: Individuals in financially precarious positions report greater fear of terrorism than individuals in less financially precarious positions.

A final set of individual determinants focuses on news media consumption. As stated by Nellis and Savage (2012), watching media stimulates fear of terrorism. However, not all media frame terrorism and outgroups in the same way. Research by Jacobs et al. (2016) teaches us that news media depict salient issues like migration in different ways, and that despite a relatively negative tone in general, commercial news contains more sensational and tabloid characteristics than public news. Public news, on the other hand, promotes a more balanced view of immigration. These different representations are also reflected in the minds and attitudes of individuals, as heavy consumers of commercial television hold more negative outgroup attitudes than heavy consumers of public broadcasters (De Coninck et al. 2020). In line with this, I expect the following:

H8: Public news media consumption is associated with lower fear of terrorism.

H9: Commercial news media consumption is associated with greater fear of terrorism.

Finally, we turn to contextual indicators of fear of terrorism. Following group threat theory, we expect fear of terrorism to be greater among citizens of municipalities with adverse economic conditions (e.g. high unemployment, low income), as these unfavourable conditions reinforce labour market competition and perceived realistic threat (Lubbers et al. 2006). Furthermore, we expect that a larger outgroup will also be associated with greater fear of terrorism.

H10: Fear of terrorism is higher in municipalities in which citizens have lower incomes than when citizens have higher incomes.

H11: Fear of terrorism is higher in municipalities in with a larger outgroup than in

municipalities with a smaller outgroup.

Data and measures

I analyzed data from an online questionnaire that was distributed among adults aged 18 to 65 in Belgium in September and October 2017, with the dataset consisting of N_i = 1,500 individuals nested in N_j = 402 municipalities. The polling agency drew a sample out of its panel with heterogeneity in terms of age and gender. The response rate was about 35 per cent and responses were weighted by gender and age to ensure that the data were representative for these characteristics in the Belgian population.[2] The survey was distributed via the polling agency's own survey tool and respondents had the option to complete the survey in Dutch or French, depending on their language preference. Translations were carried out by professional translators. Each question in the survey was presented on a different page, and respondents did not have the option to return to previous questions and change their answer. Ethical approval for this study was obtained from the Social and Societal Ethics Committee of KU Leuven (case number G- 2017 07 854).

Respondents were asked to enter the postal code of their place of residence, which allowed for multilevel analyses at the municipal level. Datasets to test theoretical arguments regarding outgroup attitudes at a municipal level are rare, because this requires a large dataset that contains information regarding fears while at the same it needs to be sufficiently fine-tuned to classify individuals into municipalities. This dataset is, to my knowledge, the first that presents these opportunities following the European refugee crisis and the recent terrorist attacks in Europe.

[2] For more information on the dataset, see De Coninck, d'Haenens, and Joris (2019).

Variables

Dependent variable

To measure fear of terrorism, I used a scale developed by Nellis and Savage (2012). It consists of several hypothetical scenarios ('Someday I may witness a terror attack', 'Someday I may be the victim of terror attack', …), with answer categories ranging from 1 = not likely at all to 11 = very likely. Whereas the original scale measured this fear for several scenarios separately ('I could be on a plane that is hijacked', 'I could be on a subway or bus that is hijacked'), I combined several items ('Someday I may be on a plane/subway/bus that is bombed') to decrease survey length. Some of the original wording was also adjusted. The items produced a one-factor solution (principal component analysis) with high internal consistency ($\alpha = .98$). Additional information regarding this scale (exact wording, internal consistency, item correlations) can be found in Appendix A.

Contextual indicators

Outgroup size variables

I used two indicators to test the association of the outgroup size with fear of terrorism. A first indicator that operationalized the outgroup population size was the *proportion of refugees and subsidiary protected individuals* per municipality on January 1, 2019. In order to account for the shock-effect of the refugee crisis in some municipalities, I also calculated *the change in this proportion* (in per cent) between 2014 and 2019. Data for these indicators for all Belgian municipalities were obtained from the Domestic Administration Agency of the Flemish Government.

Economic context variables

In order to avoid problems with specific indicators, I used two similar, but different, economic

context variables. The first is the *average taxable income per person* at the municipal level in 2018 – the richer the municipality, the higher the value. Data for this indicator were obtained from Statistics Belgium. The second is the *level of unemployment* in 2018, for which data were obtained from the Flemish government's support centre for work. Despite being a Flemish institution, they had information on this indicator for all Belgian municipalities.

Individual indicators

To account for individual indicators of fear of terrorism, I included gender and age (Ceobanu and Escandell 2010; Sloan et al. 2020). Respondents' perceived financial situation was assessed with the question 'During the last twelve months, would you say you had difficulties to pay your bills at the end of the month…?', with a response scale from 1 (most of the time) to 6 (almost never/never). Educational attainment was assessed in six categories (1 = no degree, 2 = primary education, 3 = lower secondary education, 4 = higher secondary education, 5 = higher non-university education, 6 = university education). I also controlled for migration background (1 = respondent, their mother, or father was born outside Belgium). Given Haner et al.'s (2019) findings regarding religion, I also included whether or not respondents were Christian, non-Christian, or not religious, and their degree of religiosity, which was measured by asking 'Apart from special occasions such as weddings and funerals, about how often do you attend religious services nowadays?' (1 = never, 7 = every day). Furthermore, individual attitudes towards refugees were also included. This indicator was measured through six items that were adapted from the European Social Survey. These items produced a one-factor solution following principal component analysis. For more information regarding this indicator, see Appendix B. Finally, I also included television news media consumption by asking how often during the past month people watched public television news and commercial television news (1 = never, 8 = every day) (Table 1).

Table 1. Descriptive results (N = 1,500)

	Frequency	Percentage
Gender		
Male	754	50.3
Female	746	49.7
Educational attainment		
No education	34	2.3
Primary education	47	3.1
Lower secondary education	230	15.3
Higher secondary education	479	31.9
Higher non-university education	446	29.7
University education	259	17.3
Missing	*5*	*0.3*
Religious denomination		
Christian	747	49.8
Non-Christian	177	11.8
Not religious	574	38.3
Missing	*2*	*0.1*

	Min.	Max.	Mean	*SD*
Age	18	65	47.9	12.26
Perceived financial situation	1	6	3.61	1.24
Religiosity	1	7	1.79	1.16
Attitudes towards refugees	1	4	2.50	0.83
Television news consumption				
Public broadcast news	1	8	4.61	2.77
Commercial broadcast news	1	8	4.01	2.85

Model specification

The data were analysed through multi-level modelling (MLM) (Hox, 2002; Snijders and Bosker, 1999) using proc calis in SAS Version 9.4. I used a hierarchical linear model, which is a multiple regression analysis that can handle nested sources of variability, such as individuals in municipalities. Use of this type of modelling provided an empirical advantage over regression analysis in that it did not underestimate standard errors, which would have be the case if macro-level variables were included in an ordinary least squares (OLS) regression

analysis owing to the lack of variability in the macro-level indicators. A common problem with MLM is that the N is often too small. This was not a problem here, as the current dataset contained information 1,500 individuals across 402 municipalities in Belgium, out of a total of 581 (Snijders and Bosker, 1999). Missings were deleted listwise which resulted in 1,478 valid cases. All variables were standardized by z-transformation. Preliminary analyses of the intraclass correlation coefficient indicates that 30.6% of the total variance of fear of terrorism in Belgium is explained by factors at the contextual level, which highlights the need to include such indicators in investigations of fear of terrorism.

Additionally, I addressed a concern of Andersen and Mayerl (2018) regarding the potential discriminant validity of fear of terrorism and attitudes towards refugees – as the latter may potentially just be an indicator for the former. While the authors' analyses confirmed that the indicators measured different constructs, I conducted a Pearson correlation analysis which also showed that correlations between fear of terrorism and attitudes towards refugees were weak (r = -.28, p < .01), indicating that these indicators indeed measured different concepts.

Results

I tested the hypotheses by building the multilevel model in several steps (Table 2). After running an initial model without any independent variables (Model 1), I added the individual indicators of fear of terrorism (Model 2). The primary finding at this stage was that attitudes towards refugees were negatively associated with fear of terrorism (b = -.20, p < .000): respondents who believed that refugees should be welcomed into Belgian society were less likely to believe that they (or their family) would become victim of a terrorist attack. This effect remains consistent throughout the models, which confirmed *H1*. With this result, I build on the conclusions by Andersen and Mayerl (2018) that public perceptions of outgroups must be considered when investigating fear of terrorism.

When considering the traditional vulnerability indicators, findings showed a weak negative relationship between age and fear of terrorism (b = -.05, p < .05), which contradicts earlier findings regarding both fear of terror (Lane et al. 201) and outgroup attitudes (De Coninck et al. 2020), providing no support for *H3*. Women were found to hold significantly greater fear of terrorism than men (b = .27, p < .000), which confirmed *H2* and is in line with earlier empirical evidence regarding the vulnerability perspective (Haner et al. 2019). As for economic individual indicators of group threat, the results showed that holding a positive perception of one's own financial situation was associated with a lower fear of terrorism (b = -.13, p < .000), confirming *H7*, and that more highly educated individuals held lower fear of terrorism (b = -.04, p < .10). However, since the latter finding was not statistically significant at p < .05, I could not confirm *H6*.

When reviewing results of cultural factors, results showed that non-religious individuals held significantly lower fear of terrorism than Christians (b = -.04, p < .05), but non-Christians did not differ significantly from Christians in this regard. The degree of religiosity was not significantly associated with fear. These results did not allow me to confirm either *H4* or *H5*. As for news media consumptions, findings indicated that the consumption of commercial television news consumption was positively associated with fear of terrorism (b = .14, p < .000), confirming *H9*, but public television news consumption was not associated with fear which provided no support for *H8*.. Migration background was positively associated with fear of terror (b = .05, p < .05).

Table 2. Multilevel hierarchical regression analysis of fear of terrorism

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	0.01 (0.04)	-0.16** (0.04)	-0.19*** (0.05)	-0.16** (0.04)	-0.14** (0.04)	-0.05 (0.04)
Individual indicators						
Age		-0.05* (0.03)	-0.05* (0.03)	-0.06* (0.03)	-0.06* (0.03)	-0.06* (0.02)
Gender (ref: male)						
Female		0.27*** (0.04)	0.27*** (0.04)	0.27*** (0.04)	0.27*** (0.04)	0.27*** (0.04)
Perceived financial situation		-0.13*** (0.02)	-0.13*** (0.02)	-0.13*** (0.02)	-0.13*** (0.02)	-0.12*** (0.02)
Educational attainment		-0.04 (0.03)	-0.04 (0.03)	-0.05 (0.03)	-0.04 (0.03)	-0.06* (0.03)
Migration background		0.05* (0.02)	0.05* (0.02)	0.05* (0.02)	0.05* (0.02)	0.04 (0.02)
Religious affiliation (ref: Christian)						
Non-Christian		-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.04 (0.02)
Not religious		-0.05* (0.02)	-0.05* (0.02)	-0.06* (0.02)	-0.05* (0.02)	-0.07** (0.02)
Religiosity		-0.05 (0.03)	-0.05 (0.03)	-0.05 (0.03)	-0.05 (0.03)	-0.07* (0.03)
Attitudes towards refugees		-0.20*** (0.02)	-0.20*** (0.02)	-0.20*** (0.02)	-0.20*** (0.02)	-0.20*** (0.02)
Public news consumption		-0.00 (0.02)	-0.00 (0.02)	-0.01 (0.02)	0.00 (0.02)	0.01 (0.02)
Commercial news consumption		0.14*** (0.02)	0.14*** (0.02)	0.14*** (0.02)	0.14*** (0.02)	0.13*** (0.02)
Contextual indicators						

Refugees / SP (%)			-0.10* (0.04)			
Change in refugees / SP (%)				-0.06* (0.03)		
Taxable income per person					-0.16*** (0.03)	
Level of unemployment (%)						0.44*** (0.04)
-2 Log Likelihood	4045.5	3766.3	3765.4	3764.0	3747.4	3637.5

Note: *** $p < .001$; ** $p < 0.01$; * $p < 0.05$. SP stands for 'subsidiary protected individuals'.

Standard errors in parentheses. I tested 4 additional models with interactions between the contextual indicators but found no significant interactions.

In the subsequent steps, I added contextual economic and outgroup size indicators to analyse if and how these were associated with individual fear of terrorism. In Model 3 and 4, I first added outgroup size indicators, and I then added indicators regarding the economic situation in Model 5 and 6. The results showed that a greater proportion of refugees or asylum seekers in the municipality population in 2019 was associated with lower fear of terrorism (b = -.10, p < .05). A similar finding was found for the evolution in refugee and asylum seekers numbers: a greater increase in this group between 2014 and 2019 was associated with lower fear of terrorism (b = -.06, p < .05). Despite the expectation that prejudice would increase as outgroup size did, findings provided no support for *H11*.

The indicators of economic conditions told a different story. Average taxable income per person was negatively associated with fear of terrorism (b = -.16, p < .000), indicating that residents of municipalities in which the average income was high held less fear than those of municipalities where the average taxable income was low. The municipal level of unemployment appeared to be most strongly associated with fear of terrorism: residents of municipalities with high unemployment reported significantly greater fear than residents of municipalities with low unemployment (b = .43, p < .000). These findings indicated that adverse economic conditions at the municipality level indeed stimulated a greater fear of terrorism, thereby confirming *H10*.

Discussion

In this study, I investigate how fear of terrorism is associated with dynamics of attitude formation towards refugees, in addition to more commonly used explanations of fear of crime and terrorism like the vulnerability perspective and news media effects. The motivation for this new application of group threat theory is that it in today's Western European societies, there exists a strong link in the minds of many citizens between refugees and asylum seekers, and terrorism (Lucassen 2017), which this study confirms. It became clear that due to the arrival of

many thousands of refugees and asylum seekers in European countries between 2014 and 2016, along with several large-scale terrorist attacks in European cities during this time, spurred a connection between attitudes towards refugees and fear of terrorism among Europeans (Lucassen 2017). These results build on this idea and confirm that holding negative attitudes towards refugees is indeed associated with greater fear of terrorism. With this, I corroborate Andersen and Mayerl's (2018) findings that fear of terrorism is – at least to some extent – conceptually different from fear of crime, and their conclusion that the current socio-political climate and public perceptions of outgroups must also be considered in the investigation of fear of terrorism (Andersen and Mayerl 2018). For the first time, this is also investigated in a more robust sample, representative for the adult population in Belgium. None the less, the interconnection between outgroup attitudes and fear of terrorism requires further replication in other settings.

The findings of this study have significant implications on our understanding of fear of terrorism and signal the need for a more nuanced theoretical approach of this salient issue in the future. In reaction to terrorist attacks on European soil, governments often took quick and pervasive action by deploying national armies within domestic borders, increasing CCTV, restricting immigration laws, travel bans on Muslims, and raids on Muslim organizations and mosques. In the context of the vulnerability perspective, such measures should be successful in reducing fear of terrorism, mostly because their visual nature should decrease the extent to which citizens feel 'exposed' or vulnerable to terrorists. However, "people are not afraid of terrorism because they are a member of a vulnerable group and measures designed to make these people feel less vulnerable in public spaces will not succeed" (Andersen and Mayerl 2018, p. 2651). The fact that terrorism is one of the top concerns of Europeans in 2019 (Eurobarometer 2019), despite the many anti-terror measures installed by (supra)national governments, supports this assumption.

I extend the argument that if outgroup attitudes are indeed associated with fear of terrorism, then perhaps the same frameworks that are used to explain outgroup attitudes could also be used to explain this fear. In showing that (socio-)economic prosperity at both the individual and contextual level are associated with decreased fear, the findings confirm the assumption that group threat theory can successfully be applied to fear of terrorism. As mentioned above, group threat theory states that there are two main types of threat that are distinguished: realistic and symbolic threat (Ata et al. 2009; Stephan et al. 2009). Here, we focus on realistic threat, since this aspect of threat theory concerns perceived threats of individuals to their material (job, wage, etc.) or physical well-being (due to a fear of crime). Especially this latter aspect is relevant, as it appears that economic indicators – which are commonly associated with realistic threat – are also strongly associated with fear of terrorism, given that fear of crime in indirectly already embedded in realistic threat. However, a large outgroup size was associated with decreased fear of terror – disproving some assumptions from group threat theory. These findings provide support for the idea that the contact hypothesis may also apply to fear of terrorism. This hypothesis postulates that intergroup contact reduces prejudice between members of traditionally opposed racial groups (Ata, et al. 2009). As a result, individuals who have (direct or indirect) contact with outgroups should have more positive attitudes towards them than individuals who lack contact with these groups (De Coninck et al. 2020). In municipalities with a larger outgroup, it is more likely that residents will encounter these outgroup members – which may therefore stimulate more positive attitudes, or concurrently decrease their fear of terrorism. Clearly, more research is required to investigate this line of inquiry.

None the less, I also argue that there are aspects of the vulnerability perspective that continue to be relevant in this field. Although the extant literature on outgroup attitudes struggles to find strong trends in terms of gender effects, this study – as well others in the fear

of crime-literature (Fisher and Sloan 2003; Hirtenlehner and Farrall 2004) – found that women report greater fear than men. While the vulnerability perspective explains this by arguing that women are more afraid of (physical or sexual) assault than men, there are again alternative avenues of explanation. When we look at media effects, findings show that the consumption of commercial television – which emphases sensationalism and commonly reports on outgroups using threatening frames – is associated with greater fear of terrorism, in line with earlier studies that show that these users hold more negative outgroup attitudes (De Coninck et al. 2020). De Coninck et al. (2018) found in their study that women in Belgium consume significantly more commercial television news than men, which may provide an alternative explanation for this gender divide in fear of terrorism (and in outgroup attitudes in general). Although this intersection between gender and media use in relation to terrorism fear must be further investigated, it is plausible that the increased consumption of negative or sensationalized frames about outgroups stimulate fear, regardless of gender. Men tend to watch more public television, which presents a more nuanced and balanced picture of salient topics like immigration and terrorism. This intersection between gender and news media consumption provides new avenues of research for future fear of terror-related research.

Despite expanding the literature in several ways, this study also has some shortcomings. Although some (similar) associations have been identified in earlier research, the current cross-sectional data do not allow for a temporal ordering of the link between attitudes towards refugees and fear of terrorism. It could also be hypothesized that the anxiety and fear of terror are a result of preconceived attitudes towards refugees. However, in his historical overview of discontent with migrants and refugees, Lucassen (2017) illustrates that discomfort with migrants and refugees and the growing problematization of Islam precede European' growing fear of terrorism. Furthermore, he shows that this growing fear of terror then contributes to greater populism (driven by anti-refugee rhetoric) in the following years (Lucassen 2017). With

this, he provides evidence of a bidirectional relationship between attitudes towards refugees and fear of terrorism. While this study highlights one side of this association (from attitudes to fear of terror), it may also be worthwhile to investigate the causal relationship between fear of terror and attitudes. Future research should also examine these mechanisms in other cultural and regional contexts – perhaps studies among citizens of regions or countries that did not experience any major terror events yield different results. Lastly, I also recommend that future studies more closely investigate the role of contextual characteristics. This study clearly highlights how traditional contextual group threat indicators like economic conditions and outgroup size are associated with fear of terrorism, but other indicators (e.g. regional or national crime numbers) may also be associated with it (Sloan et al. 2020).

In conclusion, I hope that these findings contribute to a more nuanced understanding of fear of terrorism among European citizens, and how theoretical frameworks that apply to outgroup attitudes may also be useful in explaining why people fear terrorism and investigate new avenues of how to combat such fears.

Disclosure of interest

No potential conflict of interest was reported by the author.

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Appendix A

Items measuring fear of terrorism

Indicate how likely you think it is that the scenario's mentioned in the table below may occur.

1. Someday, I may be on a plane/subway/bus that is bombed.
2. Someday, I may be the victim of a terror attack.
3. Someday, I may witness a terror attack.
4. Someday, family/close friends may be on a plane/subway/bus that is bombed.
5. Someday, family/close friends may be victims of a terror attack.
6. Someday, family/close friends may witness a terror attack.

Table A2. Internal consistency, standardized factor loadings, and correlations between items on fear of terrorism

(α = .98)	Factor loading	1.	2.	3.	4.	5.	6.
1.	.83***	-					
2.	.92***	.89**	-				
3.	.93***	.86**	.95**	-			
4.	.94***	.85**	.90**	.90**	-		
5.	.94***	.82**	.90**	.90**	.96**	-	
6.	.90***	.79**	.86**	.90**	.93**	.96**	-

Note. Answer options ranged from 1 (not likely at all) to 11 (very likely).

Appendix B

Items measuring attitudes towards refugees

To what extent do you think refugees mentioned below should be allowed to come and live here?

1. Refugees of the same race or ethnicity as most of [country]'s population.
2. Refugees of a different race or ethnicity than most of [country]'s population.
3. Refugees of the richer countries in Europe.
4. Refugees of the poorer countries in Europe.
5. Refugees of the richer countries outside Europe.
6. Refugees of the poorer countries outside Europe.
7. Refugees coming from Muslim countries who wish to work in [country].

Table A2. Internal consistency, standardized factor loadings, and correlations between items on attitudes towards refugees

(α = .94)	Factor loading	1.	2.	3.	4.	5.	6.	7.
1.	.78***	-						
2.	.92***	.76**	-					
3.	.80***	.74**	.72**	-				
4.	.92***	.74**	.84**	.77**	-			
5.	.86***	.70**	.77**	.87**	.77**	-		
6.	.93***	.69**	.87**	.69**	.88**	.79**	-	
7.	.87***	.62**	.82**	.65**	.78**	.75*	.85**	-

Note. Answer options ranged from 1 (allow none) to 4 (allow many).