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ORIGINAL ARTICLE

Exploring the discrimination–radicalization nexus: empirical evidence from youth and young adults in Belgium

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Abstract

Objectives Violence committed by extremists has serious violent and non-violent public health consequences. Researchers have hypothesized an association between experiencing discrimination and support for radicalization. This study examines the relationship between perceived discrimination and support for violent extremism among youth and young adults in Belgium.

Methods A total of 2037 young adults between the ages of 16 and 30 participated in the study. We used multivariate linear regression to determine the association between sociodemographic characteristics, experiences of perceived discrimination, and scores on the Radical Intention Scale (RIS).

Results Sex, religion, generation status, and language were associated with experiencing discrimination. Sex and language were associated with scores on the RIS. Discrimination based on language and political views was independently associated with scores on the RIS. Discrimination experienced during interactions with the police/justice system was also associated with RIS scores.

Conclusions Public health primary prevention programs and policies that target the relationship between discrimination and sympathy for violent radicalization need to be situated on micro- to macro-levels. Of primary importance is the development of partnerships between stakeholders in public health, legal, political, and educational sectors to develop strategies to diminish discrimination and promote positive civic engagement among youth.

Keywords Radicalization · Discrimination · Belgium · Young adults

Introduction

Violence committed by extremists has been largely absent from public health discussions around violence prevention and relegated to the field of criminal justice (WHO 2004; WHO et al. 2014; Bhui et al. 2012). This is problematic, as the phenomenon has serious violent and non-violent public health consequences including premature mortality, psychological distress in the general population, and marginalization of stigmatized minority groups (Bhui et al. 2012; Samari et al. 2018; Felton 2004). In addition, a public health framework can inform prevention programs that address micro- to macro-level risk factors for violent extremism (Bhui et al. 2012; McGilloway et al. 2015).

Violent radicalization can be defined as a commitment to an extremist ideology and involvement in violent political or social movements (Bhui et al. 2012). In recent years, multidisciplinary researchers have attempted to identify modifiable individual, interpersonal, and larger contextual risk and protective factors for violent extremism (Rousseau et al. 2017; Campelo et al. 2018; Alcalá et al. 2017; Lösel et al. 2018; Misiak et al. 2019; Bhui and Jones 2017). Specific to research conducted in Europe, micro-level risk factors include psychological vulnerabilities (such as depression), younger age, and feelings of personal uncertainty (Campelo et al. 2018). On the interpersonal level, friendships with radicalized individuals, family

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dysfunction, and social isolation are associated with support and engagement in violent extremism; larger social and environmental dynamics, including societal polarization and perceived group threat, also play a role (Campelo et al. 2018).

Grievances such as experiencing perceived injustice or discrimination are a core component in the radicalization literature, and researchers have hypothesized a relationship between experiencing discrimination, feelings of injustice, and support for violent radicalization (Alcalá et al. 2017; Bhui and Jones 2017; Rahimullah et al. 2013). Discrimination can be defined as "a socially structured and sanctioned phenomenon, justified by ideology and expressed in interactions, among and between individuals and institutions, intended to maintain privileges for members of dominant groups at the cost of deprivation for others" (Krieger 2000). Discrimination can lead to marginalization, social isolation, weakening of existing social ties and support and, ultimately, feelings of injustice on the individual level that may make people susceptible to radical ideologies and violent acts (Knapton 2014; Bhui et al. 2012; McGilloway et al. 2015; United Nations 2015).

Examining the relationship between discrimination and support for violent radicalization requires an assessment of different dimensions of the construct. One of these dimensions is perceived reasons for discrimination (Krieger 2000). Individuals may feel that they are treated unfairly because of one or more aspects of their identity, including race/ethnicity, gender, etc. A second dimension is the context in which discrimination is experienced, including settings such as seeking employment, interaction with government officials, or when attempting to access services (Krieger 2000). Finally, researchers need to consider the relationship between different kinds of discrimination experiences, such as major traumatic events or everyday micro-aggressions, and psychological distress (Krieger 2000; Kessler et al. 1999). In short, it is important to unpack "discrimination" to identify first whether there is an association between discrimination and support for violent radicalization in specific contexts, and if so, what dimensions pose the greatest risk.

Thus far empirical research on discrimination and violent radicalization has been both limited and resulted in conflicting findings. Bhui et al. (2014) assessed the relationship between perceived discrimination in the form of physical assault, damage to property, insults, and unfair treatment at work and sympathy for violent radicalization. The authors found no relationship between perceived discrimination and sympathy for violent radicalization in a sample of Muslims in England. In contrast, Rousseau et al. (2018) found that students in secondary education in Quebec who reported at least one experience of discrimination had significantly higher scores on an assessment of sympathy for violent radicalization than those who reported none. A study of Somali youth and young adults found that youth with radical beliefs reported moderate, but not high, levels of exposure to discrimination (Ellis et al. 2016); among Flemish youth in Belgium, perceived group discrimination, as opposed to perceived personal experiences of discrimination, was associated with self-reported political vandalism (Pauwels and De Waele 2014).

Current study

This study examines the relationship between perceived discrimination and support for violent extremism, as measured by the Radical Intention Scale. Using survey data from a sample of youth and young adults in Belgium, the aim of this study was to address the following research questions: (1) is there an association between perceived discrimination and support for violent radicalization?; (2) is there an association between specific reasons for discrimination and support for violent radicalization?; and (3) is there an association between the setting where discrimination is experienced and support for violent radicalization? We hypothesized that there would be an association between discrimination based on political views and religion/faith and support for violent radicalization. We also hypothesized that there would be an association between experiencing discrimination during interactions with the criminal justice system and seeking employment and endorsement of radical action.

Methods

Sample

A total of 2037 young adults between the ages of 16 and 30 participated in the study in 2017. The lower age limit was set based on requirements by the ethics board to obtain parental consent for youth under the age of 16. We excluded participants over the age of 30 from the study in order to frame the study and subsequent analysis as a study of youth and young adults. Non-traditional secondary schools were included in the study, resulting in a cohort of participants over the age of 18 (n = 465, 22.83%). We used a disproportionate stratified sampling strategy to ensure representation of young people with diverse sociodemographic characteristics. The disproportionate sampling strategy meant concretely that we selected a disproportionately large number of multicultural schools in which an above average number of youth with a migration background and of Muslim faith were enrolled. We recruited secondary schools in Brussels Capital Region, Antwerp city region, and elsewhere in Flanders (i.e., Dutch-speaking

part of Belgium) to participate in the study. These were chosen as both the city of Antwerp and the city of Brussels have significant proportions of residents of foreign origin. Within participating schools, the survey was administered in classrooms with all students 16 years of age or older. Given the survey design, there were no missing data.

Measures

Sociodemographic characteristics

Participants self-reported all sociodemographic information. Sex is measured as a binary variable (male/female); current religion was coded as a series of dummy variables for the following options: none, Christian, Muslim, Buddhist, Hindu, Jewish, and other. Age was measured as a continuous variable and coded into dummy variables in the following categories for analysis: ages 16–18, 19–21, and 22 years of age or older.

Participants were asked the country of their birth, as well as the birthplace of their mother and father. As with other sociodemographic characteristics, generation status was coded as a series of dummy variables. Individuals who reported being born outside of Belgium were identified as first-generation Belgians; individuals born in Belgium who had at least one parent born outside of the country were identified as second-generation Belgians. Those who reported both themselves and both parents born in Belgium were coded as being at least third-generation Belgians. Respondent place of birth was separated into the following categories: Belgium, Europe (excluding Belgium), Asia, Americas (both North and South America), Northern Africa and Middle Eastern countries, sub-Saharan Africa, and other.

Individuals were asked to report their first learned language(s). Respondents could report more than one language. The official languages of Belgium are Dutch, French, and German; however, the survey was not administered in the German-speaking region of Belgium. As such speaking an official language of Belgium while growing up was measured as a binary variable (yes/no), with individuals knowing Dutch and/or French coded "yes" and others coded "no." Number of languages spoken growing up was measured as both a continuous and categorical variable.

Perceived discrimination

All participants were asked to report whether they had ever experienced any discrimination (yes/no) in their lifetime. Individuals who reported yes were asked follow-up questions related to the reason they felt discriminated against and the context in which the discrimination occurred based on a questionnaire developed by Williams et al. (1997). Participants reported yes/no to experiencing discrimination for 10 different reasons: skin color, outer appearance, language, religion, political views, faith, first or last name, sexual orientation, gender, and other. Discrimination due to religion and faith was highly correlated (.64) and combined into one category. Each reason for discrimination was coded as a yes–no dummy variable. Individuals could report experiencing discrimination for more than one reason. As a result, in addition to the nine separate reasons for discrimination, reasons for discrimination were also added up for each individual and measured as a continuous and categorical variable.

Participants reported experiencing discrimination in eight different contexts: seeking work, at work, at school, in public spaces, obtaining medical services, obtaining social services, during interactions with police and the justice system, and other. As with reasons for discrimination, each context of experiencing discrimination was coded as a yes–no dummy variable. Individuals were able to report experiencing discrimination in multiple contexts and situations. Thus, in addition to the eight separate contexts of discrimination, contexts of discrimination were also added up for each individual and measured as a continuous and categorical variable.

Radical Intention Scale

The Radicalism Intention Scale (RIS) is a 4-item subscale of the Activism and Radicalism Intention Scales (ARIS) developed and validated by Moskalenko and McCauley (2009). The RIS assesses an individual's readiness to participate in illegal and violent behavior in the name of one's group or organization. Respondents rate their agreement to four statements: (1) "I would continue to support an organization that fights for my group's political and legal rights even if the organization sometimes breaks the law"; (2) "I would continue to support an organization that fights for my group's political and legal rights even if the organization sometimes resorts to violence," (3) "I would participate in a public protest against oppression of my group even if I thought the protest might turn violent"; and (4) "I would attack police or security forces if I saw them beating members of my group" (Moskalenko and McCauley 2009). The scale has been used by researchers in a variety of contexts and exhibits good psychometric properties (Ellis et al. 2016; Moyano and Trujillo 2014). Participants rated their responses on a five point Likert scale, ranging from 1 to 5, with higher scores indicating more support for violent radicalization. Cronbach's alpha for the sample was adequate ($\alpha = .79$). An IRT-graded response model was used to create latent RIS theta values (θ) for each participant. A theta score is an individual's

score on a latent trait, in this context support for radicalization, based on raw item scores weighted for each item's difficulty and discrimination values (Yen and Fitzpatrick 2006). Theta values ranged from − 1.50 to 2.86, with a mean of .16 (SD = .95). Theta values were normally distributed, with a skewness of .05 (p = 0.35) and kurtosis of 2.83 (p = 0.11).

Procedures

All procedures were performed in accordance with the ethical standards of K U Leuven and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Researchers used Qualtrics software to design the survey (Qualtrics 2018), which was administered as an online questionnaire during school hours. A written consent form described the purpose of the study. The consent emphasized participant confidentiality, and that participants could discontinue the survey at any time. Informed consent was obtained before respondents started the survey. Researchers remained in the classroom during survey administration to answer questions. On average it took 35 min to complete the questionnaire.

Data analysis

We used univariate statistics to describe the sample and prevalence of experiencing any discrimination, reasons for discrimination, and contexts in which discrimination was experienced among all participants and subpopulations based on sociodemographic characteristics. Next, we conducted bivariate linear regression analyses to assess the association between sociodemographic characteristics and theta scores on the RIS. We then built a multivariate model to identify those variables associated with scores on the RIS after controlling for other sociodemographic characteristics. Sociodemographic characteristics significant at $p < 0.15$ were retained for subsequent analysis.

Next, we built a series of models to identify the relationship between reasons for discrimination and scores on the RIS using the following approach. We conducted bivariate analyses on each of the nine reasons for discrimination and RIS scores. We also built bivariate models with number of reasons for discrimination to identify whether there was an additive effect of perceived reasons for discrimination and scores on the RIS. Subsequently, we assessed the independent association between reasons for discrimination and scores on the RIS by entering all nine reasons into a multivariate model. All models controlled for sociodemographic characteristics. Finally, we repeated this model-building approach to identify the relationship between the eight contexts in which discrimination was experienced and scores on the RIS. All statistical analyses were conducted with STATA version 15 software (StataCorp 2015).

Results

Prevalence of perceived discrimination

Over a third of respondents (37.6%) reported experiencing discrimination (see Table 1). More women reported experiencing discrimination than men (41.1% vs. 34.3%, respectively). Over half of individuals who identified as Muslim (55.6%) reported some kind of discrimination, as compared to only 30.6% of those who reported not being part of any other listed religion. Participants with one or both parents born outside of Belgium reported experiencing discrimination more frequently than first-generation immigrants (45.8% vs. 40.2%), followed by respondents residing in Belgium for at least three generations (27.3%). A total of 186 out of the 303 respondents who did not speak either Dutch or French growing up (61.4%) reported some kind of discrimination, in contrast to 33.5% of those who spoke at least one of these languages.

Lifetime prevalence for the nine different reasons for discrimination ranged from 23.4% for outer appearance to 5.1% for sexual orientation (see Table 2). A little under half of all individuals who identified as Muslim (45.9%) reported discrimination based on religion/faith, in contrast to 17.1% of participants who identified as Christian. Those who did not speak Dutch or French growing up reported more discrimination based on language (36.6%) compared to those who did speak one of the official languages (11.7%).

Lifetime prevalence for different settings of experiencing discrimination ranged from 26.3% in school to 3.8% when seeking medical services (see Table 3). A larger proportion of men than women reported experiencing discrimination when interacting with the police or justice system (10.5% vs. 6.1%). First- and second-generation respondents were much more likely to report police/justice system discrimination (14.3% and 18.3%, respectively) than those from families residing in Belgium for at least three generations (3.6%). Individuals who identified as Muslim were also more likely to report experiencing discrimination in the justice system (19.5%) as compared to respondents who identified as Christian or had no religion (10.5% and 4.0%, respectively).

Sociodemographic characteristics and radicalization

In bivariate analysis, there was a relationship between sex and RIS theta scores, with men having significantly higher

Table 1 Sociodemographic characteristics of youth and young adults in Belgium at risk of experiencing perceived discrimination

	Total sample $N = 2037$	Any perceived discrimination $N = 766$		No perceived discrimination $N = 1271$	
	N (%)	*N* (%)		*N* (%)	
Sex					
Female	980 (48.1)	403 (41.1)		577 (58.9)	
Male	1057 (51.9)	363 (34.3)		694 (65.7)	
Country/region of birth					
Belgium	1785 (87.6)	615 (34.5)		1170 (65.6)	
Europe	140 (6.9)	82 (58.6)		58 (41.4)	
Americas	20 (1.0)	14 (70.0)		6 (30.0)	
Asia	36 (1.8)	20 (55.6)		16 (44.4)	
Northern Africa and Middle East	25 (1.2)	12 (48.0)		13 (52.0)	
Sub-Saharan Africa	27 (1.3)	22 (81.5)		5 (18.5)	
Not specified	4 (.2)	1 (25.0)		3 (75.0)	
Generation					
1st generation	251 (12.3)	150 (59.8)		101 (40.2)	
2nd generation	480 (23.6)	260 (54.2)		220 (45.8)	
3rd generation	1306 (64.1)	356 (27.3)		950 (72.7)	
Religion					
None	1165 (57.2)	357 (30.6)		808 (69.4)	
Christian	477 (23.4)	195 (40.9)		282 (59.1)	
Muslim	329 (16.2)	183 (55.6)		146 (44.4)	
Buddhist	15 (.6)	6 (40.0)		9 (60.0)	
Hindu	9 (.4)	5 (55.6)		4 (44.4)	
Jewish	4 (.2)	1 (25.0)		3 (75.0)	
Other	38 (1.9)	19 (50.0)		19 (50.0)	
Dutch/French as a first language					
No	303 (14.9)	186 (61.4)		117 (38.6)	
Yes	1734 (85.1)	580 (33.5)		1154 (66.6)	
Age (categorical)					
16–18	1572 (77.17)	541(34.15)		1031 (65.85)	
19–21	433 (21.26)	206 (47.58)		227 (52.42)	
22+	32 (1.57)	19 (59.38)		13 (40.62)	
		Mean	SD	Mean	SD
Age		18.5	1.5	18.2	1.2

Belgian Research into Philosophical and Socio-Psychological Trigger Factors for Extremism (Translated from Dutch "Belgisch Onderzoek naar Levensbeschouwelijke en Socio-psychologische Triggerfactoren bij Extremisme en polaRisering" (BOLSTER)), 2017

scores than women. In a multivariate model, sex and language were associated with scores on the RIS. Men and respondents who did not speak Dutch or French as their first language had higher scores as compared to women and those who spoke one of the official languages. Number of languages spoken growing up, modeled as a categorical variable, was also associated with scores on the RIS at the $p < 0.15$ level (see Table 4).

Discrimination and radicalization

We used linear regression models to assess the association between different reasons for discrimination and scores on the RIS (Table 5). All models controlled for sex, speaking Dutch/French growing up, and number of languages spoken. Experiencing any discrimination was associated with higher RIS scores. There was also an association between number of reasons for discrimination and higher RIS scores, with individuals reporting five or more reasons for discrimination having higher scores than those reporting

Table 2 Prevalence (%) of perceived reasons for discrimination in total sample and subsamples of youth and young adults in Belgium ($N = 2037$)

	Skin color	Outer appearance	Language	Religion/faith	Political views	First or last name	Sexual orientation	Gender	Other	Total *N*
Total sample	13.1	22.4	15.4	15.9	6.4	13.9	5.1	8.7	6.0	2037
Sex										
Female	12.0	25.8	15.0	17.6	5.8	14.4	5.1	12.4	7.7	980
Male	14.0	19.3	15.7	14.2	7.0	13.4	5.0	5.3	7.5	1057
Country/region of birth										
Belgium	11.0	21.4	12.4	14.5	6.0	12.2	4.7	8.6	6.5	1785
Europe	20.7	28.6	39.3	25.7	10.7	29.3	7.9	10.0	13.6	140
Americas	50.0	30.0	25.0	15.0	5.0	15.0	10.0	10.0	20.0	20
Asia	22.2	33.3	41.7	19.4	5.6	22.2	2.8	5.6	13.9	36
North Africa/ Middle East	16.0	24.0	12.0	40.0	12.0	12.0	8.0	4.0	16.0	25
Sub-Saharan Africa	14.8	40.7	48.2	25.9	11.1	33.3	11.1	14.8	22.2	27
Other	25.0	25.0	0	25.0	0	25.0	25.0	25.0	0	4
Generation										
1st	27.5	29.5	36.3	25.5	9.6	25.9	8.0	9.2	12.4	251
2nd	23.5	34.4	24.0	34.4	10.4	25.4	7.3	11.3	7.5	480
3rd	8.8	18.6	10.9	7.2	4.6	10.0	4.0	8.4	5.0	1306
Religion										
None	8.8	18.6	10.9	7.0	4.6	10.0	4.0	8.4	6.4	1165
Christian	18.6	27.3	16.6	17.5	7.8	15.0	6.5	10.3	8.3	447
Muslim	21.0	28.9	28.3	45.9	10.6	26.4	6.7	6.7	10.3	329
Hindu	44.4	44.4	44.4	33.3	0	22.2	0	22.2	11.1	9
Jewish	25.0	25.0	25.0	25.0	25.0	25.0	0	0	25.0	4
Buddhist	6.7	20.0	26.7	0	6.7	13.3	0	6.7	13.3	15
Other	13.2	39.5	26.3	21.1	15.8	18.4	15.8	21.1	13.2	38
Dutch/French language										
Yes	10.6	20.2	11.7	12.4	2.1	11.3	4.5	2.0	6.7	1734
No	27.5	35.2	36.6	36.0	31.5	28.9	8.4	48.0	12.4	303

Belgian Research into Philosophical and Socio-Psychological Trigger Factors for Extremism, 2017

four or less. In bivariate analyses, discriminations due to skin color, outer appearance, language, religion/faith, political views, sexual orientation, and other/non-specified reasons were all associated with scores on the RIS. The magnitude of the association was strongest for discrimination due to political views. When entered into a multivariate model, only discrimination based on language and political views remained independently associated with scores on the RIS.

In bivariate analyses, individuals who reported experiencing discrimination seeking a job, working, seeking social and medical services, or interacting with the police/justice system had higher scores on the RIS compared to those who had no such experiences (Table 6). Those who reported discrimination in three or more settings had higher RIS scores compared to those who experienced none. Once entered into a multivariate model, only interactions with the police/justice system remained independently associated with scores on the RIS.

Discussion

Over a third of study participants experienced discrimination at some point in their lifetime. Our hypotheses were partially supported. Specific to our first hypothesis, we found that there was an association between experiencing discrimination for any reason and higher scores on the RIS.

Table 3 Prevalence (%) of perceived context for discrimination in total sample and subsamples of youth and young adults in Belgium ($N = 2037$)

	Seeking work	At work	At school	Public spaces	Medical services	Social services	Police or justice	Other	Total *N*
Total sample	8.8	6.1	26.3	17.8	3.8	5.0	8.4	3.8	2037
Sex									
Female	9.6	6.6	27.1	22.2	3.7	5.3	6.1	3.9	980
Male	8.0	5.6	25.5	13.7	3.9	3.7	10.5	3.8	1057
Country/region of birth									
Belgium	7.0	5.1	24.1	16.6	3.0	3.9	7.6	3.7	1785
Europe	20.0	13.6	43.6	21.4	10.7	12.1	15.0	5.7	140
Americas	20.0	15.0	40.0	35.0	5.0	15.0	10.0	5.0	20
Asia	19.4	8.3	41.7	25.0	5.6	5.6	13.9	0	36
North Africa/Middle East	16.0	4.0	28.0	24.0	8.0	12.0	12.0	8.0	25
Sub-Saharan Africa	37.0	22.2	51.9	51.9	7.4	25.9	14.8	3.7	27
Other	25.0	25.0	0	0	25.0	0	25.0	0	4
Generation									
1st	21.1	13.2	41.8	25.9	9.2	12.8	14.3	4.8	251
2nd	17.7	12.1	35.2	33.5	5.8	8.3	18.3	4.2	480
3rd	3.1	2.5	20.0	10.5	2.0	2.3	3.6	3.5	1306
Religion									
None	4.4	3.3	23.4	11.9	2.0	2.5	4.0	3.3	1165
Christian	9.0	7.2	29.8	19.9	6.0	8.5	10.5	5.4	447
Muslim	24.3	14.3	31.9	35.9	6.7	8.5	19.5	4.6	329
Hindu	22.2	0	33.3	22.2	0	11.1	11.1	0	9
Jewish	25.0	25.0	25.0	25.0	25.0	25.0	25.0	0	4
Buddhist	6.7	13.3	40.0	13.3	6.7	6.7	6.7	0	15
Other	39.5	10.5	39.5	31.6	7.9	10.5	26.3	2.6	38
Dutch/French language									
Yes	6.2	4.5	23.9	15.0	2.7	4.0	7.8	3.6	1734
No	24.2	15.4	39.9	34.2	10.1	11.1	17.8	5.0	303

Belgian Research into Philosophical and Socio-Psychological Trigger Factors for Extremism, 2017

Regarding our second hypothesis, we found that those who reported discrimination due to language and political views, but not religion/faith, had significantly higher scores on the RIS than those who did not. In contrast to our third hypothesis, we found no relationship between employment discrimination and scores on the RIS; however, there was a relationship between experiencing discrimination when interacting with the justice system and support for radical action.

The associations between discrimination based on political views, experiences with the police, and scores on the RIS are not surprising. On the one hand, police forces are often perceived as endorsing and enforcing stereotypes of minority groups—this perception of injustice is associated with anger and the feeling that authority is not legitimate. On the other hand, the RIS explicitly addresses supporting extremist behavior to counter political and legal injustices (Moskalenko and McCauley 2009). These associations are perhaps also the most susceptible to reverse causality. For instance, a person with radical political views might participate in violent demonstrations, leading to negative interactions with the police. Although perceiving discrimination in these encounters could in turn lead to individuals endorsing even more extreme ideologies, disentangling causes from effects may be difficult.

The lack of relationship between discrimination based on religion/faith and support for radical action seems surprising because it goes against popular beliefs. There is no shortage of literature arguing that perceived injustices based on religion are a leading risk factor for radicalization among Muslims in particular (Knapton 2014; Campelo et al. 2018). Our findings do not support this within the context of Belgium; in addition, while Muslims had a higher prevalence of experiencing discrimination than

Table 4 Associations between sociodemographic characteristics and score on the Radical Intention Scale among youth and young adults in Belgium ($N = 2037$)

	Bivariate		Multivariate model	
	β	CI 95%	β	CI 95%
Sex				
Female	Ref.		Ref.	
Male	0.39	(0.31; 0.47)[c]	0.40	(0.32; 0.48)[c]
Age				
16–18	Ref.		Ref.	
19–21	0.08	(− 0.03; 0.18)	0.02	(− 0.09; 0.12)
22+	− 0.22	(− 0.55; 0.11)	− 0.21	(− 0.54; 0.12)
	$F = 2.08$, $p = 0.12$		$F = 0.85$, $p = 0.43$	
Country/region of birth				
Belgium	Ref.		Ref.	
Europe	0.13	(− 0.03; 0.29)	.91	(− 0.90; 2.73)
Americas	− 0.14	(− 0.56; 0.27)	.75	(− 1.12; 2.62)
Asia	0.13	(− 0.18; 0.44)	.93	(− 0.92; 2.78)
Northern Africa and Middle East	− 0.19	(− 0.56; 0.18)	.58	(− 1.28; 2.44)
Sub-Saharan Africa	− 0.21	(− 0.57; 0.15)	.64	(− 1.22; 2.49)
Not specified	0.97	(0.04; 1.89)[a]	1.64	(− 0.40; 3.68)
	$F = 1.72$, $p = 0.11$		$F = 1.30$, $p = 0.22$	
Generation				
3rd generation	Ref.		Ref.	
2nd generation	0.10	(− 0.001; 0.20)	− 0.87	(− 2.70; 0.96)
1st generation	0.08	(− 0.05; 0.21)	0.04	(− 0.08; 0.16)
	$F = 2.19$, $p = 0.11$		$F = 0.71$, $p = 0.49$	
Religion				
None	Ref.		Ref.	
Christian	− 0.04	(− 0.14; 0.06)	− 0.02	(− 0.12; 0.08)
Muslim	0.07	(− 0.04; 0.19)	0.02	(− 0.13; 0.17)
Buddhist	0.04	(− 0.44; 0.52)	− 0.10	(− 0.59; 0.39)
Hindu	0.02	(− 0.59; 0.64)	− 0.20	(− 0.84; 0.45)
Jewish	0.44	(− 0.49; 1.37)	0.40	(− 0.54; 1.33)
Other	0.20	(− 0.11; 0.50)	0.16	(− 0.15; 0.46)
	$F = 0.88$, $p = 0.51$		$F = 0.44$, $p = 0.85$	
Dutch/French as a first language				
Yes	Ref.		Ref.	
No	0.10	(− 0.02, 0.21)	0.17	(0.02; 0.33)[a]
Number of languages spoken				
1	Ref.		Ref.	
2	0.02	(− 0.12; 0.17)	0.06	(− 0.08; 0.21)
3	0.21	(− 0.03; 0.46)	0.29	(0.03; 0.55)[a]
4 or more	0.16	(− .040; 0.72)	0.24	(− 0.32; 0.80)
	$F = 1.06$, $p = 0.36$		$F = 1.85$, $p = 0.14$	

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[a] $p < 0.05$

[b] $p < 0.01$

[c] $p < 0.001$

individuals with Christian religious affiliations, there was no association between any specific religion and support for radical action.

Mainstream media in Europe and North America has placed great emphasis on violent radicalization among new and recent immigrants (Aistrope 2016; Berbers et al. 2016;

Table 5 Association between reasons for discrimination and score on the Radical Intention Scale among youth and young adults in Belgium ($N = 2037$)

	Bivariate		Multivariate Model	
	β	CI 95%	β	CI 95%
Skin color	0.16	(0.03; 0.28)[a]	0.01	(− 0.14; 0.15)
Outer appearance	0.16	(0.06; 0.26)[b]	0.06	(− 0.07; 0.18)
Language	0.24	(0.12; 0.36)[c]	0.14	(0.004; 0.28)[a]
Religion/faith	0.24	(0.12; 0.35)[c]	0.10	(− 0.04; 0.25)
Political views	0.46	(0.29; 0.62)[c]	0.37	(0.18; 0.56)[c]
First or last name	0.11	(− 0.01; 0.23)	− 0.11	(− 0.26; 0.03)
Sexual orientation	0.20	(0.01; 0.38)[a]	0.01	(− 0.19; 0.22)
Gender	0.06	(− 0.08; 0.21)	− 0.13	(− 0.29; 0.04)
Other	0.23	(0.07; 0.38)[b]	0.14	(− 0.02; 0.30)
Any	0.09	(0.01; 0.18)[a]		
Number of reasons (continuous)	0.08	(0.05; 0.11)[c]		
Number of reasons				
0	Ref.			
1	− 0.07	(− 0.21; 0.06)		
2	− 0.05	(− 0.20; 0.10)		
3	0.01	(− 0.16; 0.17)		
4	0.10	(− 0.08; 0.29)		
5 or more	0.34	(0.10; 0.58)[b]		
	$F = 2.19$, $p = 0.05$			

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All models control for sociodemographic characteristics of sex, number of languages spoken, and speaking Dutch/French as a first language

[a] $p < 0.05$

[b] $p < 0.01$

[c] $p < 0.001$

Hafez and Mullins 2015) often neglecting to look at the phenomena in majorities. In the present study, neither original country/region of residence nor immigration status was associated with radical intentions, aligning with results from a violent radicalization study in Quebec (Rousseau et al. 2018). Instead, not being a native speaker of one of the official languages in Belgium and experiencing discrimination based on language were risk factors for scores on the RIS. In Belgium, the issue of language is extremely complex and politically loaded. Language policy at Flemish schools dictates youth to speak only Dutch and encourages parents to abandon their own language (Sierens and Van Avermaet 2014). It is common practice in Flemish schools to punish linguistic minority youth who speak other languages (Agirdag 2010). This structural marginalization might lead to complete education failures (Blommaert and Van Avermaet 2008). Immigrant youth language ability seems to be intertwined with notions of citizenship and integration within a linguistically divided society (Pulinx and Van Avermaet 2015; Clycq 2016). This is again consistent with the Quebec study, in which Anglophones reported significantly more discrimination than their bilingual or Francophone peers, in a similarly tense context around a language divide (Rousseau et al. 2018).

Limitations

There are notable limitations to this study. Most importantly, this study uses cross-sectional data which does not permit us to make causal inferences on the relationship between discrimination and scores on the RIS. Additionally, data come from a disproportionate sample of secondary school students who voluntarily responded to a survey. As such, results may not be generalizable to a broader population and should be interpreted with caution. Response biases could over- or underestimate the relationship between perceived discrimination and intentions for radical behavior. For instance, if individuals who completed the survey were less likely to have radical intentions than those who did not, we might be underestimating the relationship between perceived discrimination and scores on the RIS. Among those who did complete the survey, sensitivity around the topic of discrimination might have resulted in under-reporting of experiencing

Table 6 Association between context of discrimination and score on the Radical Intention Scale among youth and young adults in Belgium ($N = 2037$)

	Bivariate		Multivariate model	
	β	CI 95%	β	CI 95%
Seeking a job	0.21	(0.06; 0.35)[b]	0.02	(− 0.16; 0.20)
At work	0.25	(0.08; 0.42)[b]	0.10	(− 0.11; 0.31)
At school	0.07	(− 0.02; 0.17)	− 0.01	(− 0.12; 0.09)
Public spaces	0.14	(0.03; 0.25)	0.01	(− 0.12; 0.14)
Social services	0.19	(0.01; 0.38)[a]	− 0.07	(− 0.30; 0.16)
Medical services	0.30	(0.08; 0.51)[b]	0.13	(− 0.14; 0.39)
Police/justice system	0.38	(0.23; .053)[c]	0.33	(0.16; 0.51)[c]
Other	0.02	(− 0.19; 0.23)	0.06	(− 0.15; 0.27)
Number of settings (continuous)	0.06	(0.03; 0.09)[c]		
Number of settings				
0	Ref.			
1	0.01	(− 0.10; 0.12)		
2	0.10	(− 0.04; 0.24)		
3 or more	0.26	(0.12; 0.40)[c]		
	$F = 4.58$, $p = 0.003$			

Belgian Research into Philosophical and Socio-Psychological Trigger Factors for Extremism, 2017

All models control for sociodemographic characteristics of sex, number of languages spoken, and speaking Dutch/French as a first language

[a] $p < 0.05$

[b] $p < 0.01$

[c] $p < 0.001$

discrimination and the reasons and contexts in which acts of discrimination took place. A large number of false negatives in the sample could lead to underestimating the relationship between perceived discrimination and radical intention. Alternatively, there could have been over-reporting of discrimination, as participants may attribute negative experiences to prejudice against an aspect of their identity because of heightened sensitivity around the issue.

Additionally, we have no information on the nature and severity of kinds of discrimination respondents experienced. As a result, we are unable to identify whether there are variations in the relationship between perceived discrimination and scores on the RIS depending upon whether an individual experienced discrimination in the form of a major traumatic life event or everyday micro-aggressions. Additionally, we do not have detailed information on the kinds of political views held by participants who reported discrimination, nor specifics on what languages were spoken by those who felt discriminated against. This prevents us from more in-depth interpretation of the relationship between these variables and scores on the RIS.

It should be noted that given the age of the sample (youth and young adults), there was limited endorsement of experiencing discrimination in contexts such as work, medical services, and social services. As such, we may not have had the statistical power to detect an association between these contexts of discrimination and scores on the RIS, even if one exists. Finally, the vast majority of participants who reported experiencing discrimination did so for more than one reason and in more than one setting. This prevented us from testing for and identifying interactions between specific reasons for discrimination and the context in which discrimination took place.

Public health implications and future research

Despite these limitations, this study makes a significant contribution to the field of radicalization generally and has important implications for public health prevention policies and programs to counter violent extremism more specifically. Addressing violent extremism as a public health issue requires the development of partnerships between stakeholders in public health, legal, political, and educational sectors to develop strategies to diminish discrimination and promote positive civic engagement among youth (Weine et al. 2017). Primary prevention efforts need to address discrimination that marginalizes and disenfranchises youth, putting them at risk of embracing extremist ideologies (United Nations 2015). These efforts need to target different levels. First, it is imperative that national-level policies and laws promote equality and inclusiveness and send a clear message that all forms of discrimination

are unacceptable, in particular involving media in a reflection on their practices regarding the representation of minorities and migrants. At the regional level institutions like the police and the judicial power need to be trained in order to minimize harmful profiling practices. Finally, school settings, which are an essential component of youth direct environment, can become empowering forums to promote social justice, positive civic engagement, and inclusion, and in this way develop youth resilience to violent extremism. Schools can create safe and supportive environments and teach strategies that emphasize constructive dialogue around controversial topics and the importance of global citizenship (UNESCO 2017; Aiello et al. 2018). However, in order to fulfill this role schools should be seen as credible and address their own biases and blind spots. In Belgium, schools are increasingly linguistically diverse. Our results suggest that if they do not succeed in recognizing this diversity as an opportunity for learning and advocating equal opportunities, but are seen as rather endorsing only one language as the exclusive norm, this may fuel feelings of injustice and actual discrimination (Sierens and Van Avermaet 2014). Specifically, language inclusion and facilitating functional multilingual learning might be effective antidotes for perceptions of discrimination and marginalization and consequently for intentions for radical behavior. Importantly, there is a need to consider multi-level interventions that not only work to diminish discrimination, but also promote non-violent social and political mobilization among individuals who feel discriminated against (Rousseau et al. 2017).

Study findings suggest several areas for future research. As mentioned earlier, most youth who reported experiencing discrimination did so for more than one dimension of their identity. More detailed work is needed to identify connections between reasons for discrimination, the contexts in which discrimination is experienced, and sympathy for violent radicalization. For instance, future studies can survey youth regarding settings in which they were discriminated, and inquire as to the reasons for discrimination within that specific context. There is also a need to study other dimensions of discrimination and possible connections with violent extremism. More specifically, we should examine whether experiencing major lifetime and traumatic events due to discrimination has a differential relationship with supporting violent radicalization than experiencing micro-aggressions on a regular basis, a distinction frequently explored in social epidemiological research on discrimination and adverse psychological outcomes (Kessler et al. 1999). Finally, future studies using longitudinal designs that can examine the relationship between discrimination over time and sympathy for violent radicalization are warranted.

Conclusions

Identifying risk factors for support of violent radicalization is an important first step in developing evidence-based primary prevention programs that decrease the population-level risk of perpetrating violence. Examining the relationship between perceived discrimination and radical intention furthers our knowledge of the larger sociopolitical contexts that may make individuals susceptible to the radicalization process. Study findings can be leveraged to inform public health interventions for at-risk populations, including school- and community-based programs that promote positive civic engagement and violence reduction.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

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