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# Perceived islamophobia: Scale development and validation

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### ABSTRACT

"Islamophobia" has been used as an umbrella term capturing different types of religious stigma towards Muslims. However, the operationalization of the term for research purposes varies greatly, where little attention heretofore has been paid on how islamophobia affects Muslim minorities' lives. Against this background, we aimed to develop and validate the Perceived Islamophobia Scale (PIS). In the first study (167 German-Arabs, 184 German-Turks and 205 British-Pakistanis), exploratory factor analyses of a preliminary item pool gave support of a three-factor scale in all samples. Subscales were computed for each factor (i.e., perceptions of a general fear of Islam and Muslims, fear of islamization, and islamophobia in the media), which were reliable across the samples. In all samples, the PIS was positively related to psychological distress and in two samples this relation remained significant, after controlling for experiences of discrimination. In Study 2 (262 German-Turks, 277 French-Maghrebis and 249 British-Pakistanis), confirmatory factor analyses supported the structural equivalence of the scale's three-factor solution. The PIS was positively related to perceived stress and discrimination. Lastly, PIS predicted higher levels of religious and ethnic identification, controlling for discrimination. The PIS seems to be a valid and reliable measure across different Muslim minority groups. The fact that perceptions of islamophobia in two samples negatively predicted psychological distress after controlling for experiences of discrimination, suggests that anti-discrimination laws may be insufficient in protecting Muslim minorities of the negative effects of stigma on psychological well-being.

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## 1. Introduction

Islamophobia is gradually gaining scientific acceptance as a construct distinct from closely related terms, such as anti-Muslim stereotypes, racism or xenophobia (Lee, Gibbons, Thompson, & Timani, 2009). However, the development of instruments assessing fear towards Muslim and Islam is still in its early stages. While one scale is available to assess islamophobic sentiments among members of the larger society, there is to date no instrument available to capture Muslim minorities' own perception of islamophobia in their societies of settlement. Given that many instruments exist that measure, for instance, minorities' perceived ethnic discrimination (e.g., Contrada et al., 2001) or perceived racism (e.g., McNeilly et al., 1996), the development of a respective scale seems timely in view of the rise of anti-Muslim attitudes in the Western World.

Against this background, the goal of the present article is twofold: first to develop a Perceived Islamophobia Scale (PIS), and second to investigate its construct validity by testing whether it predicts Muslim minorities' psychological well-being

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and identity and whether it is associated with perceived discrimination. The paper comprises of two studies with samples from four different Muslim minority groups: German-Arabs, German-Turks, French-Maghrebis and British-Pakistanis.

### 1.1. Operationalizing islamophobia

As Europe's economies started to revive in the aftermath of the Second World War, immigration was not only encouraged, but a necessity for many Western European governments. As a result, many traditionally culturally more or less homogenous countries have become home to a broad range of ethno-cultural groups. Initially, their religious belief played a subordinate role in the partly xenophobic sentiments prevalent in public discourse in most of the immigrant receiving countries. However, as Strabac and Listhaug (2008) state, "a series of international events in the last couple of decades has increased the saliency of the Muslim religion as a marker of minority-group identity" (p. 269). There is no gainsaying that negative attitudes towards Islam and Muslims as a religious group have risen in the Western world, in particular after the terror attacks of 9/11 in the United States. Reports have shown a substantial increase of discrimination and assaults on Muslims and a rise of negative attitudes towards Muslims in the Western majority populations (e.g., Allen & Nielsen, 2002; EUMC, 2005; EUMC, 2006) and the media (e.g., Saeed, 2007).

This development in attitude has increasingly been termed "islamophobia", a term introduced by the Runnymede Trust Commission (1997). However, as social phenomena come to the fore, controversies about their scope, definition or even existence arise. Thus, the term "islamophobia" has been plagued with controversies. While some researchers have placed islamophobia in line with other forms of phobia and defined it as an irrational fear of Islam and Muslims (Gottschalk & Greenberg, 2008), others have criticized it, and equated it to another term for anti-Muslim hostility and stereotypes (see, e.g., Halliday, 1999). Central to this critique is the way islamophobia has been operationalized. Studies vary widely in their operationalization, and many researchers seem to have used the term as though it was synonymous with anti-Muslim stereotypes, discrimination or racism rather than fear (see Lee et al., 2009 for a discussion).

In line with Lee et al. (2009), we argue that islamophobia should essentially be understood as an affective part of social stigma towards Islam and Muslims, namely fear. Put in a nutshell, we adopt Gottschalk and Greenberg's (2008) definition of islamophobia as "a social anxiety towards Islam and Muslim cultures" (p. 5) in the present study. Thus, in contrast to negative stereotypes towards Muslims (e.g., putting Muslims on a level with terrorists), islamophobia can be seen as explicitly focusing on the fear response towards Muslims and their religion. Individuals can be thought to personally experience such a fear in their own life, for instance by being avoided, which would be similar to the experiences commonly referred to as discrimination. However, they can also be thought to gather a more aggregated perception of fear-based islamophobia as a group norm or attitude of the members of the dominant society.

Research showing that personal stigma experiences (e.g., in form of discrimination) and perceived stigma in form of group norms can have different effects on psychological well-being, underscore the importance of scales measuring both types of constructs. For instance, a study showed that whereas personal discrimination negatively predicted self-esteem, group discrimination predicted higher levels on the variable (Bourguignon, Seron, Yzerbyt, & Herman, 2006). In addition to replicating the latter findings, another study showed that group discrimination predicted higher levels of in-group identity, whereas personal discrimination did the opposite (Armenta & Hunt, 2009).

Scales measuring islamophobia from such a group and fear perspective are rare. We could only identify one scale that has been developed to assess fear-based islamophobia among non-Muslim majority groups (see, e.g., Lee et al., 2009). Moreover, only one study so far seems to have investigated *perceived* islamophobia and some of its psychological effects among Muslim minorities (see Kunst, Tajamal, Sam, & Ulleberg, 2012). However, the items used to measure islamophobia did not report on some important psychometric properties, such as the structural equivalence, which is a prerequisite in cross-cultural comparative studies (Van de Vijver & Leung, 1997).

### 1.2. The effect of stigma experiences on minority's psychological adaptation and identity

Adapting to, or living in, a cultural sphere or society that is different from one's heritage culture can be a psychologically demanding process for ethnic minorities (Walsh, Shulman, & Maurer, 2008). Assessing ethnic minorities' psychological adaptation in form of their psychological well-being has been a prominent approach to gather information about their psychological functioning in the society of residence. Because ethnic minorities often constitute social groups that are chronically exposed to negative attitudes in the society, experiences of stigma can be a factor that can critically influence this adaptation.

In various studies, stigma experiences have been shown to have detrimental effects on individuals' psychological adaptation. Experiences of, for instance, discrimination or racism have frequently been associated with negative psychological outcomes, such as anxiety, depression and psychological distress (see, e.g., Jung, Hecht, & Wadsworth, 2007; Pascoe & Smart Richman, 2009; Todorova, Falcón, Lincoln, & Price, 2010; Yip, Gee, & Takeuchi, 2008). A similar relationship has also been observed between negative meta-stereotypes (i.e., the perception of the majority's negative stereotypes towards one's group) and psychological adaptation (Gordijn, 2010; Vorauer, Main, & O'Connell, 1998).

While to date there is dearth of studies directly measuring the effects of religious stigma on Muslim minorities' psychological adaptation, a recent study elucidates the potential role societal stigma might play in this regard. Johnston and Lordan (2011) compared the psychological adaptation of British Muslims before and after 9/11. Their results found a significant

worsening in health, which they attributed to the increase of religious stigma in the British society during this period of time. It is therefore reasonable to assume that religious stigma is related to Muslim's psychological adaptation.

In addition to being a predictor of adaptation, stigma has also shown to have its influence on minorities' in-group identity. For instance, studies have given some support to the Rejection-Identification Model (RIM; Branscombe, Schmitt, & Harvey, 1999), which assumes stigma experiences to predict higher levels of in-group identification among ethnic minorities (see, e.g., Jetten, Branscombe, Schmitt, & Spears, 2001; Leach, Mosquera, Vliek, & Hirt, 2010). The RIM has also received some support with Muslim minorities. In a study conducted by Verkuyten and Yildiz (2007), perceived discrimination predicted higher levels of religious identification among Muslim Dutch-Turks. In a study conducted by Kunst et al. (2012) however, the RIM was supported only for a sample of German-Turks, while no respective relation was observed among a sample of Norwegian-Pakistanis.

### 1.3. Overview over the studies

Study 1 of this article constitutes the first step in developing a scale to assess Muslim minorities' perceptions of islamophobia, the Perceived Islamophobia Scale (PIS). In addition to piloting an item pool in three Muslim minority samples, the study investigated the scale's construct validity, based on its correlation with an established discrimination measure and a measure of psychological distress. Last but not least, it tested whether PIS would be related to psychological distress even as we controlled for individual experiences of discrimination.

In the second study, we aimed at validating the scale's factor structure that we obtained in Study 1. Moreover, we investigated its construct validity by examining how it related to a measure of perceived stress and discrimination. Last, we tested whether the PIS, in accordance with RIM, could predict participants' religious and ethnic identities. Similar to Study 1, we were here interested in whether this relationship would remain significant after controlling for personal experiences of discrimination.

## 2. Study 1

While the first step of the present study was to construct the PIS, the second was to validate the scale. As described earlier, stigma experiences have shown to be negative predictors of minorities' psychological adaptation. Hence, if the PIS would be related to higher levels of psychological distress, this would support the criterion validity of the scale. Moreover, the PIS was expected to be moderately correlated with an established measure of discrimination, such as the Everyday Discrimination Scale (Williams, Yu, Jackson, & Anderson, 1997). Both the PIS and the latter scale aim to measure stigma constructs. However, while the Everyday Discrimination Scale focuses on individual experiences of discrimination, the PIS aims at measuring the perception of societal fear towards one's own religious group. One can expect that both scales are moderately and positively correlated, indicating that they assess similar but still distinct constructs. All relations were investigated in three different Muslim minority groups, namely German-Arabs, German-Turks and British-Pakistanis.

Hypothesis 1: PIS predicts higher levels of psychological distress, indicating criterion validity.

Hypothesis 2: PIS is positively correlated with the Everyday Discrimination Scale, supporting the convergent validity of the scale.

Hypothesis 3: PIS is positively related to psychological distress, controlled for the Everyday Discrimination Scale.

### 2.1. Methods

#### 2.1.1. Participants

The sample consisted of 167 German-Arabs, 184 German-Turks and 205 British-Pakistanis. Most of the participants were young adults,  $M_{\text{age}} = 23.8$  ( $SD = 5.7$ ), and the three groups did not differ in terms of age,  $F(2, 551) = .37$ ,  $p = .69$ .

There were more female participants among the German-Arabs (57.5%) and German-Turks (57.1%) than in the British-Pakistani sample (42.9%). However, each sample could be described as relatively even in terms of gender distribution. While nearly half (49.1%) of the German-Arab participants were second generation immigrants, this applied to more than two thirds of the German-Turks (71.2%) and only to about one fourth (26.3%) of the British-Pakistanis. The British participants reported a better education than their German counterparts. Nearly two-thirds (63.4%) of the British-Pakistanis, but only 37.6% of the German-Turks and 23.6% of the German-Arabs held a university degree. German-Arabs and German-Turks reported mostly primary or secondary school as their highest education.

#### 2.1.2. Procedure

Data was collected through online surveys between the period of October and December 2011. The surveys were translated from English into German and French using forward-back translation by bilingual teams. Participants were recruited through Muslim organizations, Muslim online newspapers, personal contacts and social networks. Before participating, respondents were informed about the study's purpose, its confidentiality and the right to withdraw from participation at any given time. Respondents could choose to participate in the drawing of a gift voucher equivalent to 50 Euros.

### 2.1.3. Instruments

2.1.3.1. *Demographics.* Questions assessed the participants' age, gender, generational status and ethnic group membership. Participants were also asked to indicate their highest education at the time of data collection.

2.1.3.2. *Preliminary item pool of the Perceived Islamophobia Scale.* In order to establish a preliminary item pool, we used two sources, namely a qualitative pilot study and a literature review. Because the purpose of this study was to measure Muslims' own perceptions of societal islamophobia, it was important to gather information about how members of Muslim minorities would grasp the term. In a pilot study, therefore, 53 participants belonging to Muslim Minorities in Germany, the United Kingdom, Norway, France and Denmark were asked to describe what they perceived as a "typical islamophobic person". Two descriptions were particularly recurrent. First, many participants characterized typical islamophobic persons as being afraid of Muslims and Islam because they associated it with danger, terror and violence. Secondly, typical islamophobic persons were described as being afraid of Islam because they perceived it as intolerant and incompatible with, or even as undermining, western values, such as democracy and female rights. The two recurring responses could be related to the Integrated Threat Theory (Stephan, Ybarra, & Bachman, 1999): the first pattern that emerged from the pilot study can be defined as the perception of Muslims and Islam as a realistic threat (i.e., a threat to the very existence of the perceiver). The second pattern that emerged from the pilot study could be described as the perception of Muslims and Islam as a symbolic threat (i.e., a threat towards the perceivers' values).

In addition to the realistic and symbolic threat aspects of islamophobia, we considered media as a particular important sphere. Reports have shown a great increase in negative portrayals of Muslims and Islam in media (e.g., EUMC, 2006; Saeed, 2007). The study of Kunst et al. (2012) additionally indicated that Muslim minorities perceive high levels of negative portrayals of their religion and religious group in media. Therefore, we included islamophobia in media as a third aspect of islamophobia when developing items for the item pool.

Thus, building on the pilot study and a review of the existing measures (i.e., Kunst et al., 2012; Lee et al., 2009) we developed a pool of 18 items of which four were reversed coded. The items were presented in such a way that they measured participants' perceptions of islamophobia, and in the form of fear towards Islam and Muslims among the majority population. Particular attention was paid to ensure that the items could not be confounded with the perception of negative stereotypes of Muslims, for instance the association of Muslims with terrorists. One of the items was adapted from González, Verkuyten, Weesie, and Poppe (2008) and rephrased in order to match the purpose of the study. Participants had to rate their agreement with all 18 items on 6-point Likert scales, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

2.1.3.3. *Psychological distress.* The degree to which participants experienced psychological distress in their lives was measured with the 10-item version of Kessler's Psychological Distress Scale (Kessler et al., 2002). On a 5-point Likert-type scales ranging from 1 (*none of the time*) to 5 (*all of the time*), participants answered questions that assessed symptoms of nervousness, anxiety and depression. A sample item is "During the last 30 days, about how often did you feel depressed?" The reliability coefficient for the scale was satisfactory across the samples (German-Arabs:  $\alpha = .92$ ; German-Turks:  $\alpha = .88$ ; British-Pakistanis:  $\alpha = .91$ ).

2.1.3.4. *Discrimination.* The Everyday Discrimination Scale (Williams et al., 1997) was adopted to assess the frequency to which the participants experienced discrimination in their daily lives. Participants were asked to indicate the frequency to which they had experienced nine types of incidents, such as "been treated with less respect", on a 6-point scale ranging from 1 (*never*) to 6 (*almost every day*). Alpha values were satisfactory in all samples (German-Arabs:  $\alpha = .91$ ; German-Turks:  $\alpha = .86$ ; British-Pakistanis:  $\alpha = .94$ ).

### 2.1.4. Analysis of data

First, an exploratory factor analysis of all items using maximum likelihood was conducted for each sample separately. Based on the results, subscales were computed for each factor and its reliability coefficients were estimated. Second, in order to gather information about the scale's validity, correlation analyses were conducted to test whether the subscales were associated with the discrimination and psychological distress variables. Finally, in order to test whether the PIS could predict participants' psychological distress controlling for discrimination, hierarchical multiple regression analyses were conducted for each sample. In Step 1 of the hierarchical regression, demographic variables were introduced, and experienced discrimination and the PIS subscales were introduced in the Step 2.

## 2.2. Results

### 2.2.1. Preliminary statistics

Kaiser–Meyer–Oklin statistics indicated that these were satisfactory for all the samples (German-Arabs: KMO = .89; German-Turks: KMO = .85; British-Pakistanis: KMO = .92). Similarly, Bartlett's Test of Sphericity was significant at  $p < .001$  for all the groups.

**Table 1**  
Factor loadings for exploratory factor analyses with oblique rotation across samples.

Item	General fear			Fear of islamization			Islamophobia in media		
	GA	GT	BP	GA	GT	BP	GA	GT	BP
1. Many Germans avoid Muslims.	<b>.75</b>	<b>.50</b>	<b>.61</b>	.05	.07	.25	.11	.07	.08
2. Germans are suspicious of Muslims.	<b>.70</b>	<b>.50</b>	<b>.53</b>	.05	.16	.26	.05	.01	-.16
3. In general, Germans trust Muslims.	<b>-.70</b>	<b>-.84</b>	<b>-.57</b>	.03	.14	-.14	.03	-.05	.05
4. Overall, only few Germans are afraid of Islam.	<b>-.64</b>	<b>-.54</b>	<b>-.49</b>	-.18	-.12	.10	.01	.07	.01
6. Most Germans feel safe among Muslims.	<b>-.54</b>	<b>-.81</b>	<b>-.65</b>	.13	.10	.06	-.02	.05	-.05
8. Many Germans get nervous in the presence of Muslims.	<b>.42</b>	<b>.48</b>	<b>.74</b>	.04	.13	.06	-.02	-.08	-.01
10. Many Germans fear an "islamization" of Germany.	.05	.19	.07	<b>.85</b>	<b>.97</b>	<b>.94</b>	-.04	.04	.02
11. A lot of Germans are afraid that Muslims are going to take over Germany.	-.08	.01	.10	<b>.82</b>	<b>.80</b>	<b>.84</b>	-.11	-.04	-.08
13. A lot of people consider Islam a threat to German values.	.26	-.14	-.16	<b>.50</b>	<b>.68</b>	<b>.70</b>	-.13	.07	-.07
15. Often, German media presents Muslims as dangerous people.	.01	.14	.02	.03	-.09	-.10	<b>.88</b>	<b>.94</b>	<b>1.0</b>
16. In the media, Islam is often presented as a threat to German culture.	-.09	.04	.00	.18	.10	.03	<b>.82</b>	<b>.70</b>	<b>.84</b>
17. German media spreads fear of Muslims and Islam.	-.02	-.12	.03	.08	-.02	-.01	<b>.75</b>	<b>.66</b>	<b>.85</b>

Note. GA = German-Arabs ( $n = 167$ ), GT = German-Turks ( $n = 184$ ), BP = British-Pakistanis ( $n = 205$ ), factor loadings  $> .3$  boldface.  $r_{F1,F2} = .42$  (GA),  $.54$  (GT),  $.57$  (BP).  $r_{F1,F3} = .41$  (GA),  $.31$  (GT),  $.42$  (BP).  $r_{F2,F3} = .27$  (GA),  $.34$  (GT),  $.52$  (BP).

### 2.2.2. Exploratory factor analysis

Based on eigenvalues and the scree plot, exploratory factor analyses yielded a three-factor solution in each sample. In the German-Arab sample, the first, second and third factors explained 38.7% (eigenvalue = 6.96), 11.3% (eigenvalue = 2.04) and 9.6% (eigenvalue = 1.73) of the variance respectively, accounting for 59.6% of the total explained variance. For the German-Turkish sample, the first factor explained 35.6% (eigenvalue = 6.40), the second factor 11.5% (eigenvalue = 2.06) and the third factor 7.9% (eigenvalue = 1.67) of the variance. The three factors accounted for 56.3% of the total variance in this sample. In the British-Pakistani sample the three-factor solution accounted for 65.2% of the total variance, with the first factor accounting for 46.5% (eigenvalue = 8.39), the second factor, 10.8% (eigenvalue = 1.94) and the last factor 7.9% (eigenvalue = 1.41) of the total variance.

An earlier study found substantial positive inter-correlations among different constructs of religious stigma (Kunst et al., 2012). Since we expected this also to be the case for potential factors of the scale that we developed, we conducted a direct oblimin rotation of all items. Twelve items could be identified that substantially ( $>.40$ ) loaded on the same factor across the three samples with no cross-loadings above  $.30$  in any of the samples (see Table 1), and the factors were readily interpretable. Items loading on the first factor measured the perception of a general fear towards Islam or Muslims, including the perception of fear-related responses, such as avoidance and nervousness. The second factor seemed to represent the perception of fear of islamization within society. Lastly, items loading on the third factor seemed to assess the perception of islamophobia in national media. All factors were positively inter-correlated (see note of Table 1).

### 2.2.3. Reliability analyses

Based on the results of the EFA, three subscales (i.e., general fear, fear of islamization, islamophobia in the media) and a full scale consisting of 12 items were computed. The sum scores were divided by the respective number of items in order to yield easy interpretable results. All scales showed satisfactory reliability coefficients, and only the media subscale was substantially and negatively skewed (see Table 2). All scales were inter-correlated from a weak to moderate degree.

### Hypothesis 1

We expected the PIS to predict higher levels of psychological distress, which would support the scale's criterion validity. Significant correlations between the cumulative PIS and some of its subscales with psychological distress were found in all samples. To start with, the general fear subscale predicted higher levels of psychological distress in the German-Arab ( $\beta = .17$ ,  $p < .05$ ) and German-Turkish ( $\beta = .22$ ,  $p < .01$ ) samples (see Table 2). The fear of islamization subscale predicted higher levels of psychological distress in the British-Pakistani sample ( $\beta = .24$ ,  $p < .001$ ). A cumulative scale comprising all of the subscales predicted higher levels of distress in each of the samples (German-Arabs:  $\beta = .17$ ,  $p < .05$ ; German-Turks:  $\beta = .17$ ,  $p < .05$ ; British-Pakistanis:  $\beta = .18$ ,  $p < .01$ ).

### Hypothesis 2

In support of the scale's convergent validity, the PIS was expected to be positively correlated with the Everyday Discrimination Scale. In all samples, the results supported the hypothesis (see Table 2). The strengths of the correlations ranged from  $.21$  to  $.64$  in the German-Arab sample, from  $.32$  to  $.52$  in the German-Turkish sample and from  $.45$  to  $.68$  in the British-Pakistani sample.

### Hypothesis 3

We expected the PIS to predict psychological distress, after we have controlled for discrimination. This was the case in the German-Turkish and British-Pakistani sample. Hierarchical regression analyses showed that in both samples one subscale of the PIS significantly predicted psychological distress after controlling for discrimination (see Table 3). Specifically, the



**Table 2**

Psychometric properties and correlates of the scales across samples.

Scale	Items	$\alpha$	<i>M</i>	<i>SD</i>	Skew	2.	3.	4.	5.	6.
1. General fear	6									
German-Arabs		.80	4.32	.82	-.34	.44***	.34***	.86***	.64***	.17*
German-Turks		.80	4.37	.75	-.32	.47***	.22**	.84***	.48***	.22**
British-Pakistanis		.83	3.47 <sup>a</sup>	1.01	.10	.59***	.40***	.88***	.63***	.13
2. Fear of islamization	3									
German-Arabs		.82	4.65	1.07	-.86	-	.41***	.77***	.40***	.13
German-Turks		.85	4.81	1.11	-1.14	-	.29***	.78***	.32***	.07
British-Pakistanis		.88	3.42 <sup>b</sup>	1.36	-.04	-	.48***	.83***	.55***	.24***
3. Fear in media	3									
German-Arabs		.87	5.44	.88	-2.49	-	-	.67***	.21**	-.05
German-Turks		.80	5.37	.88	-1.87	-	-	.58***	.32***	.05
British-Pakistanis		.92	5.05 <sup>c</sup>	1.25	-1.35	-	-	.71***	.45***	.08
4. Cumulative Scale	12									
German-Arabs		.85	4.68	.70	-.64	-	-	-	.59***	.17*
German-Turks		.83	4.73	.66	-.82	-	-	-	.52***	.17*
British-Pakistanis		.89	3.85 <sup>d</sup>	.95	-.24	-	-	-	.68***	.18**
5. Discrimination	9									
German-Arabs		.91	3.17	1.13	-.11	-	-	-	-	.27***
German-Turks		.86	3.31	.99	-.29	-	-	-	-	.25***
British-Pakistanis		.94	2.71 <sup>e</sup>	1.22	.31	-	-	-	-	.32***
6. Psychological Distress	10									
German-Arabs		.92	2.06	.84	.78	-	-	-	-	-
German-Turks		.88	2.04	.75	.79	-	-	-	-	-
British-Pakistanis		.91	2.05	.81	.85	-	-	-	-	-

Note. Potential range for scales 1–5 = 1–6, potential range for scale 6 = 1–5. German-Arabs:  $n = 167$ ; German-Turks:  $n = 184$ ; British-Pakistanis:  $n = 205$ . The mean in the British-Pakistani sample for the scales 1–5 was significantly different from the two other samples.

<sup>a</sup>  $F(2, 553) = 64.24, p < .001, \text{est } \eta^2 = .19$ .

<sup>b</sup>  $F(2, 553) = 78.87, p < .001, \text{est } \eta^2 = .22$ .

<sup>c</sup>  $F(2, 553) = 7.99, p < .001, \text{est } \eta^2 = .03$ .

<sup>d</sup>  $F(2, 553) = 75.76, p < .001, \text{est } \eta^2 = .22$ .

<sup>e</sup>  $F(2, 553) = 15.13, p < .001, \text{est } \eta^2 = .05$ .

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

**Table 3**

Hierarchical multiple regression analyses predicting psychological distress for the different samples.

Predictor	German-Arabs		German-Turks		British-Pakistanis	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	.01		.04		.02	
Age		-.05		-.18*		.02
Gender <sup>a</sup>		.07		.08		.14
Generational status <sup>b</sup>		-.07		-.02		-.05
Step 2	.08**		.09**		.13***	
Age		-.09		-.18*		-.00
Gender		.04		.13		.10
Generational status		-.06		-.06		-.12
Discrimination		.27**		.17*		.37***
PIS islamization subscale		.03		-.07		.20*
PIS fear subscale		.00		.22*		-.17
PIS media subscale		.00		-.08		-.10

Note. German-Arabs:  $n = 167$ ; German-Turks:  $n = 184$ ; British-Pakistanis:  $n = 205$ .

<sup>a</sup> 1 = male, 2 = female.

<sup>b</sup> 1 = first generation, 2 = second generation.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

fear subscale predicted higher levels of psychological distress in the German-Turkish sample ( $\beta = .22, p < .05$ ), whereas the same applied to the islamization subscale in the British-Pakistani sample ( $\beta = .20, p < .05$ ).

### 2.3. Discussion

The present study constituted the first step in constructing a preliminary scale to measure Muslim minorities' own perceptions of societal islamophobia. A 12-item Perceived Islamophobia Scale (see Table 1) with three subscales (i.e., general

fear of Islam and Muslims, fear of islamization, and islamophobia in media) was developed. Exploratory factor analyses indicated similar factor structures between the samples and the reliability of the scale and subscales was satisfactory.

Perceived islamophobia was found to predict higher levels of psychological distress across the groups, providing criterion validity to the newly developed PIS. Furthermore, the PIS and its subscales were positively correlated with an established measure of perceived discrimination with the strengths of the correlations ranging from medium to strong. This finding supports the convergent validity of the scale, but also indicates that the scale measures a construct that is different from discrimination. In this respect, it also showed that the degree to which the PIS is related to experienced discrimination varied across cultures.

Hierarchical regression analyses indicated that the PIS subscales positively predicted psychological distress after controlling for the Everyday Discrimination Scale in two of the three samples. The later finding suggests that perceptions of islamophobia may negatively impinge on Muslim minorities' psychological adaptation irrespective of whether the individuals have experienced personal discrimination or not.

### 3. Study 2

The aim of the second study was to validate the three-factor structure of the PIS that was observed in the first study. Similar to study one, we also investigated the criterion and convergent validity of the PIS by testing its relation to an established measure of perceived discrimination developed by Flores et al. (2008) and the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). Moreover, we investigated whether the PIS, in line with the RIM (Branscombe et al., 1999), predicted the participants' ethnic and religious identities, which if so, would be in support of the scale's criterion validity. Analogous to Study 1, we were in this regard interested in whether the PIS would predict the participants' ethnic and religious identities when we control for discrimination. All relations were tested in three samples of German-Turkish, French-Maghrebi and British-Pakistani Muslims. In addition to validating the three-factor solution of the scale, the following hypotheses were tested:

Hypothesis 1: PIS is positively related to perceived stress, indicating criterion validity.

Hypothesis 2: PIS is positively related to discrimination, supporting its convergent validity.

Hypothesis 3: PIS is positively correlated with both ethnic and religious identity, as assumed by the RIM, supporting the criterion validity of the scale.

Hypothesis 4: PIS predicts the participants' identities, after controlling for discrimination.

#### 3.1. Method

##### 3.1.1. Participants

All in all, 262 German-Turkish, 277 French-Maghrebi and 249 British-Pakistani Muslims participated in the study. Like in the first study, participants were mostly young adults,  $M_{\text{age}} = 25.0$ ,  $SD = 5.8$ , and no differences in age were observed,  $F(2, 784) = .89$ ,  $p = .42$ . Both genders were relatively equally distributed across the samples with 47.3% female participants among German-Turks, 50.5% among French-Maghrebis and 42.5% among British-Pakistanis. The vast majority of the German-Turkish participants were second generation immigrants (87.8%), whereas this applied to about half of the French-Maghrebi (56.7%) and British-Pakistani (47.0%) participants.

Across the samples, the majority of participants indicated work or studies as their own or their family's motivation to migrate to their present country of residence (German-Turks: 82.5%; French-Maghrebis: 67.9%; British-Pakistanis: 62.4%). In terms of educational background, the majority of German-Turks reported that they had finished secondary school (81.3%), in contrast to 18.7% who reported a university degree. Among French-Maghrebis, 30.7% of the participants indicated that they had finished secondary school, while 69.3% held a university degree. Last, among British-Pakistanis, 42.5% of the participants indicated secondary school as their highest accomplished education, whereas 57.0% held a university degree.

##### 3.1.2. Procedure

Online surveys were used to collect data in a period of February to March 2012. The surveys were translated and participants were recruited using the same procedure as described in Study 1.

##### 3.1.3. Instruments

Unless stated otherwise, responses were rated on 6-point Likert scales, ranging from 1 (*totally disagree*) to 6 (*totally agree*).

**3.1.3.1. Demographics.** Analogous to Study 1, questions assessed the participants' age, gender, generational status and education.

**3.1.3.2. Perceived Islamophobia Scale.** Participants had to indicate their agreement with the 12 items that were retained in Study 1. As an attempt to reduce the skewness of the media subscale, the respective three items measuring perceived islamophobia in the media were slightly rephrased (e.g., "Islam is *always* presented as a threat to British culture in the media."; see Appendix A for all items of the final scale).

**Table 4**

Fit Indices for structural equation models across groups.

Model	$\chi^2$	df	p	CFI	sRMR	RMSEA	$\Delta\chi^2$	$\Delta df$
1. Measurement weights constrained	256.8	138	<.001	.990	.038	.033		
2. Weights and structural covariances constrained	318.5	150	<.001	.981	.055	.038		
3. Weights, structural covariances and residuals constrained	597.3	196	<.001	.935	.059	.051		
4. Unconstrained model	178.6	120	<.001	.990	.030	.025		
Difference between model 1 and 2							61.7*	12
Difference between model 1 and 3							340.5*	58
Difference between model 1 and 4							78.2*	18

Note. CFI=Comparative Fit Index; sRMR=standardized root mean square residual; RMSEA=Root Mean Square Error of Approximation.

\*  $p < .05$ .

**3.1.3.3. Discrimination.** A 14-item scale developed by Flores et al. (2008) measuring perceived discrimination was adopted. Participants had to indicate the frequency to which they perceived themselves to be victim of discrimination, rated on 4-point scales ranging from 1 (*never*) to 4 (*very often*). An example item is “How often are you discriminated against because you are British-Pakistani?” Factor analysis indicated a 2-component solution with ten items loading on the first factor in all samples. Hence, a sum score was computed with the ten respective items. The scale showed satisfactory reliability across the samples (German-Turks:  $\alpha = .88$ ; French-Maghrebis:  $\alpha = .86$ ; British-Pakistanis:  $\alpha = .92$ ).

**3.1.3.4. Perceived stress.** A six-item version of the Perceived Stress Scale was adopted from Cohen, Kamarck and Mermelstein (1983) to assess the frequency to which the participants had experienced stress during the last one month (German-Turks:  $\alpha = .82$ ; French-Maghrebis:  $\alpha = .84$ ; British-Pakistanis:  $\alpha = .88$ ). Responses were rated on 5-point scales, ranging from 1 (*never*) to 5 (*very often*). An example item is “In the last month, how often have you felt nervous and ‘stressed’?”

**3.1.3.5. Religious identity.** Due to very high alpha values in earlier studies (e.g., Kunst et al., 2012; Verkuyten & Yildiz, 2007), a shortened version of the religious identity importance subscale developed by Verkuyten and Yildiz (2007) was adopted (German-Turks:  $\alpha = .92$ ; French-Maghrebis:  $\alpha = .92$ ; British-Pakistanis:  $\alpha = .93$ ). The scale assesses the experienced centrality of individuals’ religious group and belief for their self-concepts. Respondents had to indicate their agreement with three items, such as “My Muslim identity is the most important part of myself.”

**3.1.3.6. Ethnic identity.** We used the revised Multigroup Ethnic Identity Measure developed by Phinney and Ong (2007) to assess the degree to which the participants identified with their ethnic group. Factor analysis gave support of a one-factor solution and alpha values were satisfactory across the samples (German-Turks:  $\alpha = .86$ ; French-Maghrebis:  $\alpha = .88$ ; British-Pakistanis:  $\alpha = .89$ ).

### 3.1.4. Analysis of data

First, multi-group structural equation modeling (SEM) was used to investigate the fit of the scale’s three-factor solution. More specifically, we compared a model where the measurement weights were constrained, with two further constrained models and an unconstrained model. This procedure allowed us to gather information about the structural equivalence of the factor solution. Since chi-square test is a less adequate fit estimate for samples with more than 200 cases, the following fit indices were used in addition to estimate the models’ fit: Comparative Fit Index (CFI), standardized Root Mean Square Residual (sRMR) and Root Mean Square Error of Approximation (RMSEA).

After the confirmatory factor analysis, we tested for correlations between the scale and the convergent and criterion variables. Last, using another structural equation model, we investigated whether PIS could predict religious and ethnic identity, controlled for the discrimination variable.

## 3.2. Results

Chi-square tests of all models were significant (see Table 4), which was not surprising in light of the large sample size in our analysis. In regard of the different fit indices assessed, although the unconstrained model showed the best fitness to the data, even the model with constrained measurement weights, structural covariances and residuals performed well on the sRMR and RMSEA (see Table 4). When comparing the CFI values of the models, no difference could be observed between the unconstrained model and the model where the measurement weights were constrained. Hence, all in all, the results supported the structural equivalence of the scale’s three-factor structure. Accordingly, we computed sum scores for each factor and for a cumulative scale comprising all of the items. The reliability coefficient of each scale was satisfactory across the samples (see Table 5). In regard of the distribution of scores on the scales, the reworded media subscale was equally skewed as it was in Study 1. There was however less variation in the subscale’s reliability coefficients across the samples than in Study 1.



**Table 5**  
Psychometric properties of the scales across samples.

Scale	Items	$\alpha$	M	SD	Skew	Correlations			
						Discrimination	Stress	Ethnic id.	Religious id.
1. General fear									
German-Turks		.80	3.52	.49	.07	.21***	.16*	.11	.16**
French-Maghrebis		.84	3.55	.46	.34	.10	-.04	.08	.08
British-Pakistanis		.85	3.74 <sup>a</sup>	.55	.36	.17**	-.02	.09	.07
2. Fear of islamization	3								
German-Turks		.86	4.61	1.26	-.86	.39***	.11	.19**	.08
French-Maghrebis		.88	5.16	1.02	-1.55	.32***	.22***	.20**	.13*
British-Pakistanis		.90	4.16 <sup>b</sup>	1.40	-.53	.40***	.23***	.22***	-.10
3. Fear in media	3								
German-Turks		.94	5.13	1.20	-1.51	.39***	.13*	.19**	.18**
French-Maghrebis		.95	5.51	.94	-2.35	.37***	.19**	.21**	.32***
British-Pakistanis		.94	4.85 <sup>c</sup>	1.43	-1.14	.37***	.22***	.22***	-.03
4. Cumulative Scale	12								
German-Turks		.90	4.42	.77	-1.09	.46***	.16*	.22***	.17**
French-Maghrebis		.89	4.74	.57	-1.41	.42***	.22***	.25***	.27***
British-Pakistanis		.92	4.25 <sup>d</sup>	.92	-.91	.43***	.23***	.24***	-.05

Note. German-Turks:  $n = 262$ ; French-Maghrebis:  $n = 277$ ; British-Pakistanis:  $n = 249$ .

<sup>a</sup> The mean for British-Pakistanis was higher than in the other samples,  $F(2, 787) = 14.96$ ,  $p = .00$ ,  $\text{est } \eta^2 = .04$ .

<sup>b</sup> All means differed significantly from each other,  $F(2, 787) = 43.07$ ,  $p < .001$ ,  $\text{est } \eta^2 = .10$ .

<sup>c</sup> All means differed significantly from each other,  $F(2, 787) = 20.25$ ,  $p < .001$ ,  $\text{est } \eta^2 = .05$ .

<sup>d</sup> All means differed significantly from each other,  $F(2, 787) = 27.97$ ,  $p < .001$ ,  $\text{est } \eta^2 = .07$ .

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

### Hypothesis 1

As an assessment of PIS's criterion validity, we hypothesized that the scale would be positively related to perceived stress. Our assumption was partially supported. Across the samples, the fear in the media subscale (German-Turks:  $\beta = .13$ ,  $p < .05$ ; French-Maghrebis:  $\beta = .19$ ,  $p < .01$ ; British-Pakistanis:  $\beta = .22$ ,  $p < .001$ ) and the cumulative scale (German-Turks:  $\beta = .16$ ,  $p < .05$ ; French-Maghrebis:  $\beta = .22$ ,  $p < .001$ ; British-Pakistanis:  $\beta = .23$ ,  $p < .001$ ; see Table 5) predicted higher levels of perceived stress. The fear of islamization subscale, however, predicted higher levels of stress only in the French-Maghrebi ( $\beta = .22$ ,  $p < .001$ ) and British-Pakistani sample ( $\beta = .23$ ,  $p < .001$ ). In contrast, the general fear subscale was correlated with stress only among German-Turks ( $\beta = .16$ ,  $p < .05$ ).

### Hypothesis 2

We expected the PIS to be positively correlated with the discrimination variable, which would support the scale's convergent validity. The hypothesis obtained support. In the German-Turkish and British-Pakistani sample, all scales were positively related to discrimination from weak to moderate degrees (see Table 5). Correlations were of equal strength in the French-Maghrebi sample, however, the correlation between the general fear subscale and discrimination remained insignificant.

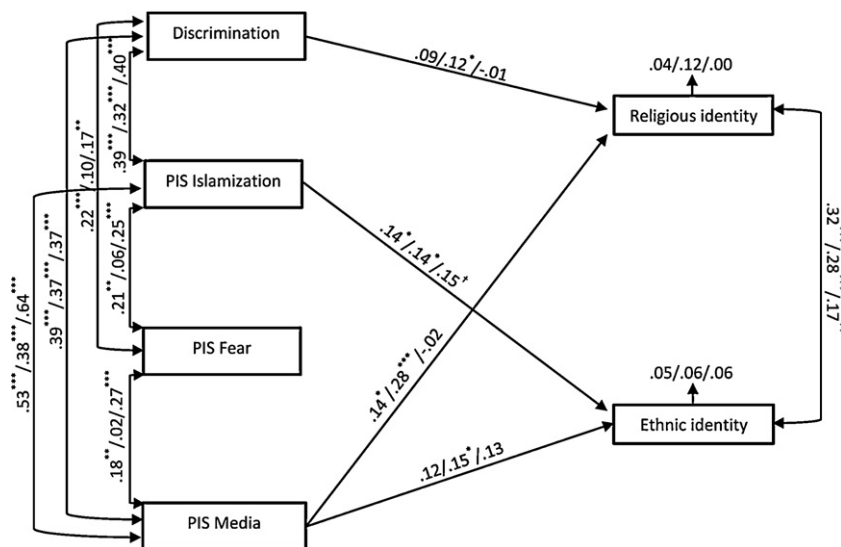
### Hypothesis 3

On the basis of the RIM, we expected the PIS to be positively correlated with ethnic and religious identification. The hypothesis obtained some support in all of the samples. While the general fear subscale was not correlated with ethnic identity in any sample, ethnic identity was correlated with the islamization (German-Turks:  $\beta = .19$ ,  $p < .01$ ; French-Maghrebis:  $\beta = .20$ ,  $p < .01$ ; British-Pakistanis:  $\beta = .22$ ,  $p < .001$ ), the media (German-Turks:  $\beta = .19$ ,  $p < .01$ ; French-Maghrebis:  $\beta = .21$ ,  $p < .01$ ; British-Pakistanis:  $\beta = .22$ ,  $p < .001$ ) and the cumulative scale (German-Turks:  $\beta = .22$ ,  $p < .001$ ; French-Maghrebis:  $\beta = .25$ ,  $p < .001$ ; British-Pakistanis:  $\beta = .24$ ,  $p < .001$ ) across the samples (see Table 5).

Regarding participants' religious identity, results were less uniform and did only support the hypothesis in the German-Turkish and French-Maghrebi sample. The fear scale was significantly related to religious identity only in the German-Turkish sample ( $\beta = .16$ ,  $p < .01$ ). Similarly, only among French-Maghrebis, the islamization scale predicted higher levels of religious identification ( $\beta = .13$ ,  $p < .05$ ). In both of the samples however, the media subscale (German-Turks:  $\beta = .18$ ,  $p < .01$ ; French-Maghrebis:  $\beta = .32$ ,  $p < .001$ ) and the cumulative scale (German-Turks:  $\beta = .17$ ,  $p < .01$ ; French-Maghrebis:  $\beta = .27$ ,  $p < .001$ ) were significantly positively related to religious identity.

### Hypothesis 4

We predicted the PIS to be related to the identity measures, after discrimination had been controlled for. The results of the unconstrained structural equation model ( $\chi^2 = 15.25$ ,  $p = .23$ ; sRMR = .032, CFI = .994, RMSEA = .019) partially supported our hypothesis (see Fig. 1). First, the discrimination variable predicted ethnic identity in none of the samples, and religious identity solely in the French-Maghrebi sample ( $\beta = .12$ ,  $p < .05$ ). In contrast, the islamization subscale predicted higher levels



**Fig. 1.** Estimated unconstrained structural equation model. Coefficients displayed in the following order: German-Turks/French-Maghrebis/British-Pakistanis;  $^*p < .055$ ,  $^*p < .05$ ,  $^{**}p < .01$ ,  $^{***}p < .001$ .

of ethnic identity among German-Turks ( $\beta = .14$ ,  $p < .05$ ) and French-Maghrebis ( $\beta = .14$ ,  $p < .05$ ), while the same relation remained slightly insignificant in the British-Pakistani sample ( $\beta = .15$ ,  $p = .055$ ). Furthermore, the media subscale predicted higher levels of religious identification in the German-Turkish ( $\beta = .14$ ,  $p < .05$ ) and French-Maghrebi ( $\beta = .28$ ,  $p < .001$ ) sample. Lastly, the sub scale predicted higher levels of ethnic identity among French-Maghrebis ( $\beta = .15$ ,  $p < .05$ ).

### 3.3. Discussion

Our results gave support of the three-factor solution reported in Study 1. Even a factorial model, in which the measurement weights, structural covariances and residuals were constrained, showed satisfactory structural equivalence and fit to the data. Hence, it seems that the three-factor structure of the PIS is stable across different cultural groups and societies. The results also gave certain support to the scale's construct validity. The fact that the PIS and its subscales were correlated with the discrimination measure supported the convergent validity of the scale. In support of the scale's criterion validity, two of the three subscales predicted higher levels of stress across the samples.

Lastly, the PIS was partially correlated with the participants' ethnic and religious identification in all samples. This finding can be seen as further supporting the scale's criterion validity, as the relations were in line with the RIM. It is important to note, however, that the results of our structural equation model showed that discrimination only had a single effect on religious identity in one of the samples, whereas the PIS predicted higher levels on religious identity in two of the samples, and higher levels of ethnic identity in all of the samples. Hence, our results suggest that discrimination in fact may play less of a role for Muslim minorities' identity concepts than perceived islamophobia plays.

## 4. General discussion

Islamophobia, as a phenomenon describing fearfulness towards Muslims and Islamic religions, has received increased attention during the last decade and can be assumed to continue to play an important role in the social sciences. Nevertheless, measures that assess the phenomenon as fear of Islam and Muslims are rare and no measure has to date been developed to measure perceptions of islamophobia from the Muslim minority perspective. The present study sought to fill this gap. In two studies conducted with in all five samples of western European Muslim minority groups, we developed and validated the Perceived Islamophobia Scale. Our results showed that the factor structure of the PIS was equivalent across different cultural groups. In addition, our findings supported the scale's construct validity. As expected, the scale predicted higher levels of psychological distress in Study 1 and higher levels of perceived stress in Study 2. This finding supported the scale's criterion validity and showed that perceived islamophobia, in accordance with earlier studies on the relation between stigma and adaptation, is a negative predictor of Muslim minorities' psychological adaptation. Second, the scale was positively related to established discrimination measures in both studies. These positive correlations underscore the convergent validity of the scale. Last, the PIS did, in accordance with the rationale of the RIM, predict higher levels of in-group identification, which again supports the scale's criterion validity.

#### 4.1. The perception of islamophobia across countries

Despite the satisfactory psychometric characteristics of the scale across the samples, it is important to discuss the several differences in results between the samples, as these differences may be related to contextual variables.

Across the groups, participants appear to experience the highest level of islamophobia in the media. This finding supports the notion of Allen (2001) that media can be considered as a global and the “most accessible and indiscriminate disseminator” (p. 2) of islamophobic sentiments in the Western World. The degree to which perceptions of islamophobia in the media were correlated with perception of a general fear and fear of islamization, however, differed across the samples. A general emerging pattern is that the perception of islamophobia in media covaried more substantially with the other two types of islamophobia perceptions in the British-Pakistani sample than in the German and French samples. Thus, even though no causality between the three types of perceptions can be ascertained, one might speculate that, in particular in the UK, Muslims’ perception of societal islamophobia is shaped by the media. In Germany and France however, the perception of general islamophobic sentiments and the fear of islamization might be more independent from how one’s religious group is presented in media.

Another pattern that emerged was that Pakistanis in Britain seem to perceive less islamophobia than Turks and Arabs in Germany, while Maghrebis in France appeared to experience the highest level of islamophobia of all the groups. This difference in results may be explained by certain societal characteristics of the countries that were part of our study. The civic society of the United Kingdom has “historically accommodated a much greater religious pluralism and today allows greater freedom of religious associations” (Casanova, 2005, p. 3) than many other western multicultural societies. Hence, the acceptance and integration of additional religious groups into society may be less arduous than in other countries. This may account for why British-Pakistanis in the present study displayed the lowest perception of islamophobia of all groups. In sharp contrast, in France the concept of *laïcité* involves a quite aggressive division between the state and religion, that “has made it difficult for Muslims (...) to argue that the state should accommodate their particular religious practices” (Soper & Fetzer, 2009, p. 41). The ban of the headscarf in public schools and the public stir this law enforcement caused can be seen as illustrative examples of the tense public climate regarding religious diversity and Islam that French Muslims are confronted with. This public climate may, in turn, explain the high perceptions of islamophobia among the French-Maghrebis in the present study. Lastly, the situation in Germany has often been described as in between that of France and the UK (Azzaoui, 2008; Soper & Fetzer, 2009). While the public opinion climate might not be as tense as in France, Germany is “experiencing a great deal of discussion about Muslim integration” (Azzaoui, 2008, p. 39). Prominent examples are the recurrently reviving contentions about whether Muslims should be allowed to build mosques and the fact that some *Länder* have established laws that forbid female Muslim teachers to wear a headscarf. Thus, the interpretation of the public climate towards Islam and Muslims in Germany as being more heated than in the UK, but less heated than in France, may explain why German Muslims scored lower on the PIS than their French counterparts, but higher than their British counterparts.

#### 4.2. Implications for societies

In particular, the finding that perceived islamophobia is related to participants’ psychological well-being and identity, controlled for experienced discrimination has important societal implications. Based on our results, it appears that perceptions of belonging to a group that is feared in society has itself a distinct effect on Muslim minorities’ health and identification, regardless whether individuals personally experience discrimination in their daily lives or not. While anti-discrimination laws may offer religious minorities some protection from direct experiences of discrimination, they may be futile with regards to group norms, which in this research have shown to negatively impinge on Muslim minorities’ adaptation. Putting it bluntly, solely enforcing strict anti-discrimination laws upon an otherwise islamophobic society seems unlikely to protect Muslims from psychological harm. We, therefore, encourage policy makers to aim at internal change in their populations’ group norms and attitudes. Regarding this, our study also underlines the responsibility of national media. In both studies, participants perceived very high degree of islamophobia in the media and this perception predicted higher levels of stress in all of the samples in Study 2. We encourage the media therefore to be aware of the harmful effects their negative portrayals of ethno-cultural minorities can have on the members of the respective groups.

#### 4.3. Strengths and limitations

The present studies had a number of strengths and limitations of which some are noteworthy. First, the fact that our study sample was considerably large, comprising all in all 1344 Muslim minority members from four different cultural groups in three different countries, constitutes a strength. Because the vast majority of participants were young adults, our results may be relatively generalizable to the respective age segment of Muslim minorities in the West. However, it remains uncertain whether the findings can be generalized to other age segments and the broader population. It is also important to note that our sample may be biased since participants were solely recruited online.

The PIS showed good construct validity, reliability and a factor structure that was structurally equivalent across the different cultural groups. However, a possible limitation regarding the scale’s structural equivalence in Study 2 is that the CFI value dropped from .981 to .935 when not only the weights and covariance, but also the residuals were constrained. While this finding may somewhat weaken the assumption of structural equivalence, it is important to note that

the RMSEA and sRMR values remained satisfactory. In addition, it should be noted that the CFI, which is one of the most stringent fit estimates, was still above the common cut-off criteria of .90 for the most constrained model (see Hu & Bentler, 1999).

When validating the PIS, our studies could have been improved by testing the convergent validity of the scale by comparing it to measures of group discrimination instead of personal experiences of discrimination. As the PIS operates on a group level, future studies could test the scale's validity by investigating its relation to a respective measure.

Although we found good construct validity, it is still possible that our item pool did not sufficiently cover all aspects of the "fear of Islam". Since the perception of islamophobia showed to vary across countries, we are in essence uncertain whether we have adequately explored the construct. For this reason, future studies may want to further explore whether the scale can be expanded to other areas.

Lastly, islamophobia should be regarded as a social phenomenon that is strongly influenced by social events. It would therefore be good to undertake longitudinal studies to gather information about the scale's stability over time and the degree to which it is influenced by societal changes.

## 5. Conclusion

Studies have shown that many Muslims not only experience religious discrimination in their daily lives, but are fully aware of their devalued position in society (see, e.g., Kunst et al., 2012). The present article adds an important aspect for understanding the impact of religious stigma on Muslim minorities in the Western World. The opinion climate in some west-European countries seems to have reached a severity that impairs Muslim minorities' psychological health. We encourage societal opinion leaders, such as politicians and the media, to take these findings seriously. In order to prevent escalation in religious stigma, attention should be paid on ways to harmonize the relations between Muslim minorities and the respective societal majority groups. As this study shows, perceiving societal fear towards one's faith and religious group may, irrespective of personal experiences of discrimination, negatively impinge on one's psychological health. Anti-discrimination laws alone may thus not be sufficient to protect Muslim minority members from psychological harm. Therefore, political and media campaigns scrutinizing and refuting negative clichés about Muslims and Islam might constitute a vital approach to leading people to question or even to discard their negative views and sentiments. This might foster intercultural contact and improve the relations between the respective social groups.

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## Appendix A. Final 12 items of the Perceived Islamophobia Scale

Respondents are asked to indicate their agreement with the following items rated from 1 (*totally disagree*) to 6 (*totally agree*)

- 
1. Many Germans avoid Muslims.
  2. Germans are suspicious of Muslims.
  3. In general, Germans trust Muslims.\*
  4. Overall, only few Germans are afraid of Islam.\*
  5. Most Germans feel safe among Muslims.\*
  6. Many Germans get nervous in the presence of Muslims.
  7. A lot of Germans are afraid that Muslims are going to take over Germany.
  8. Many Germans fear an "islamization" of Germany.
  9. A lot of Germans consider Islam a threat to German values.
  10. German media always presents Muslims as dangerous people.
  11. Islam is always presented as a threat to German culture in the media.
  12. German media spreads a lot of fear of Muslims and Islam.
- 

General fear: item 1–6; Fear of islamization: item 7–9; Islamophobia in the media: item 10–12.

\* Reversed item.

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