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## Revalidation of Islamophobia Scale: The Fuzzy Delphi Method Approach

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### Abstract

Islamophobia is generally defined as the systematic racism against Muslims and the lived experiences of prejudice against those who are thought to be Muslim. Muslim-majority countries face a wide range of Islamophobic threats, from the global to the local to the bodily and psychological. Since the issue related to Islamophobia is an important global issue then the need for a valid measurement tool is necessary. Thus, this study aimed to revalidate the Islamophobia Scale and get an agreement and expert views for this scale. This study employs Fuzzy Delphi method using a 7 Likert scale to collect responses of 9 experts in specific fields. A total of 10 item questionnaire was given to experts for evaluation. Fuzzy Delphi method was used for data analysis. Data were analyzed using triangular fuzzy numbering (triangular fuzzy number) and position (ranking) of each variable is determined using the 'defuzzification' process. The findings show that, response and expert consensus on the Islamophobia scale is at a good level. The overall findings of the expert consensus agreement exceed 75%, the overall value of the threshold  $(d) < 0.2$  and a  $\alpha$ -cut exceeds 0.5. The priority guidelines elements were sorted by priority and were refined by adding and dropping item as recommended by experts. Further study is proposed for future researcher reference.

**Keyword:** Islamophobia, Fuzzy Delphi, Validation, Expert Agreement

### Introduction

After the events of September 11 became a starting point to Islamophobia around the world. As a result, atrocities such as boycotts, bullying and hatred are increasing from time to time. The Muslim community may be subjected to Islamophobia in many facets of day-to-day life, including but not limited to sentiments of rejection, harassment, fear, and hate speech, amongst other things (Amer and Bagasra, 2013; Union of Muslim Communities in Spain, 2018). According to the European Union Agency for Fundamental Rights (2018), as stated in its Second Survey of the European Union on Minorities and Discrimination for Muslims, 39 percent of the sample reported having the experience of being discriminated against because of their place of origin (Bravo et al., 2021). As a group, 35 percent of women said they felt discriminated against, an increase of 11 percentage points from 2008. The poll found that

31% of respondents had been harassed, 39% had been subjected to abusive glances or gesticulations in the 12 months before to the survey, and 22% had been insulted due to their immigrant or Muslim status. After a jihadist attack, some research suggests that hate crimes against Muslims increase (Ivandic et al., 2019).

In many Western European countries, the rise in anti-Muslim incidents is cause for grave worry (Githens-Mazer & Lambert, 2010). The recent terrorist incidents and political disputes concerning the prominence of Muslim populations and their seeming difficulty in 'integrating' into European society are to blame for this growth. These disputes have been ongoing in non-Muslim nations, particularly France and the United Kingdom (UK), over the past ten years or so, and have resulted in a number of laws forbidding the display of religious symbols in public places. Criticizing religious and cultural traditions is vital, but this "political enterprise" has eventually led to troubling processes of marginalisation, such as the increasing stigmatisation of Muslim populations (Najib & Hopkin, 2018).

Since the late 1990s, there has been a rise in research on Islamophobia, but few studies have focused on the spatial components of the phenomenon. Sociologists, anthropologists, and political scientists have mostly studied Islamophobia. Religion-based discrimination is a major focus for social and cultural geographers. Extensive studies have looked at issues such Muslim exclusion and Islamophobia (Dwyer 1999; Hancock 2015; Hopkins et al., 2017); spatial justice; racism; identity; and feminist geography (McGinty et al., 2012). This paper's goal is to examine how Islamophobia is interpreted geographically, and how a geographic approach is crucial for us to comprehend the experiences of Islamophobia. Islamophobia is defined as anti-Muslim hate crimes against Muslim or supposed Muslim populations and institutions in this research study, and we define Islamophobia as such. Assaults, verbal abuse, harassment, physical attack, and so forth are all types of hate crimes that are motivated by bias or discrimination (Najib & Hopkin, 2018).

### **The History behind the Islamophobia**

There has been a long history of Western fear of Muslims, and it existed before to September 11, 2001 (Laflamme, 2018). However, the rise of anti Muslim Islamophobia in the United States, Canada, and Europe was sparked by the events of September 11, 2001 (Allen and Nielsen, 2002; Wilkins, 2018). Media and popular culture began to portray Muslims in a negative and stereotypical light, and that trend has mostly persisted ever since. "Closed conceptions of Islam" continue to be widely disseminated through the mainstream media, which is viewed as a primary source for Western viewers (Odartey-Wellington, 2009).

Since September 11, 2001, political rhetoric, institutional measures, and racial profiling have all contributed to the rise of Islamophobia in the United States. Right-wing speech on the matter is still prominent under the pretence of safeguarding "Canadian values," though perhaps not as prevalent as in Trump's United States or certain European nations (Laflamme, 2018). Security personnel and police frequently use racial profiling against Muslims and other visible minorities. Furthermore, Islam and Muslims are seen as a particular threat to the public sphere's religious neutrality and secularity (Nadeau and Helly, 2016).

### **Measuring the Islamophobia**

Given that studies related to islamophobia are a very important issue nowadays, the need for authentic and valid measurement tools is necessary. A review of the literature and analysis was made by the researcher (see table 1) of the fund found that there are several studies of the construction of measuring instruments that measure Islamophobia such as (Sherma at al.,

2013; Kunsta et al., 2013; Roland et al., 2012; Ahmad, 2020; Meer, 2013; Naheed, 2020; Anisah et al., 2019 & Allen et al., 2020). The results of research made by researchers, previous studies in the process of building instruments measuring Islamophobia mostly use Factor Analysis (EFA) as a validity analysis. The study also did not find that expert validity analysis was performed. Therefore the researcher will perform validity by using Fuzzy Delphi method or expert agreement in creating validity.

### Previous Studies on Islamophobia Scale

Table 1

*Previous work on Islamophobia scale*

No	Author	Study title	Year	Analysis/methodology
1	Sherman A. Lee	Fear of Muslims: Psychometric Evaluation of the Islamophobia Scale	2013	Exploratory Factor Analysis (EFA)/ Confirmatory factor Analysis (CFA), Test & Retest Reliability
2	Jonas R.Kunsta, David L.Samb,Pål Ulleberga	Perceived Islamophobia: Scale development and validation	2013	Exploratory Factor Analysis (EFA)
3	Roland Imhoff & Julia Becker	Differentiating Islamophobia: Introducing a New Scale to Measure Islamoprejudice and Secular Islam Critique	2012	Exploratory Factor Analysis (EFA)
4	Naheed Ahmed	Development and validation of scales for measuring perceived islamophobia in the u.s	2020	Reliability & Correlation Test
5	Nasar Meer	Semantics, scales and solidarities in the study of antisemitism and Islamophobia	2013	Not Specified
6	Ahmed, Naheed	Measuring and Assessing the Health Implications of Perceived Islamophobia Discrimination among South Asian Muslim Americans	2020	Exploratory Factor Analysis (EFA)
7	Anisah Bagasra and Mitchell Mackinem	Assessing Aspects of Acculturation in a Muslim American Sample: Development and Testing of the Acculturation Scale for Muslim Americans	2019	Exploratory Factor Analysis (EFA)

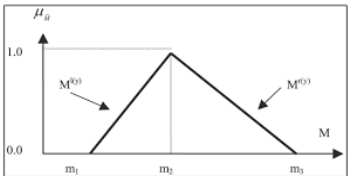
8	G. E. Kawika Allen, Kenneth T. Wang, P. Scott Richards, Mason Ming & Han Na Suh	Religious Discrimination Scale: Development and Initial Psychometric Evaluation	2020	Exploratory Analysis (EFA)	Factor
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## Methodology

This study uses the Fuzzy Delphi Method in making validation because there is little variation because most studies that make validation usually use factor analysis. However, the effectiveness of the fuzzy delphi method cannot be denied in the validation process, especially the expert validation process. In addition, this method is very effective because it focuses on the expertise of experts in identifying the suitability of items. Research done by an expert will show which items are constructed appropriately or not used effectively in measuring an item. Therefore, this study will use the Fuzzy Delphi Method in validating the Islamophobia scale.

## Fuzzy Delphi Step

Step	Formulation	Step	Formulation
1. Expert selection	Nine experts were consulted for this study. Using linguistic variables, a panel of experts examined the impact of assessment criteria on the aspects to be evaluated. and the definitions of any potential issues with the piece.	5. Identify the alpha cut aggregate level of fuzzy assessment	If there is agreement among the experts, a hazy number is given to each item (Mustapha & Darussalam, 2017). Fuzzy values can be calculated and measured using the following method: $(1) 4 (m_1 + 2m_2 + m_3)$ Amax
2. Determining linguistic scale	All language factors are translated into the counting of fuzzy triangles as part of this method (triangular fuzzy numbers). Fuzzy numbers will be used in the translation of linguistic variables as part of this change (Hsieh, Lu and Tzeng, 2004). $M^1$ , $M^2$ , and $M^3$ are all represented by the Triangular Fuzzy Number, which is expressed as follows ( $m_1$ ,	6. Defuzzification process	For this step, the formula $A_{max} = (1)4(a_1+2a_m+a_3)$ is used. If the researcher uses Average Fuzzy Numbers or the average response, the score is a number between

	<p>m2, m3). The smallest possible value is represented by m1, a rational value is represented by m2, and the maximum possible value is represented by m3. When turning linguistic variables into fuzzy numbers, Triangular Fuzzy Number is utilised to create Fuzzy Scale.</p> 		<p>0 and 1. (Ridhuan et al.2014). In this process, there are three formulas: i. <math>A = 1/3 * (m1 + m2 + m3)</math>, or ii. <math>A = 1/4 * (m1 + 2m2 + m3)</math>, or iii. <math>A = 1/6 * (m1 + 4m2 + m3)</math>. A-cut value is the middle number between 0 and 1, where - cut = <math>(0+1/2) = 0.5</math>. If the resultant A value is less than the - cut value of 0.5, the item will be rejected because it doesn't show that experts agree. Bojdanova (2006) says that the alpha cut value should be more than 0.5. Tang and Wu (2010) agree with it. They said that the -cut value should be more than 0.5.</p>
<p>3. The Determination of Linguistic Variables and Average Responses</p>	<p>Researchers must transform all measurement results to fuzzy scales after they have advice from the designated expert. This is frequently recognised as a way of acknowledging each correct response (Benitez, Martin &amp; Roman, 2007).</p>	<p>7. Ranking process</p>	<p>The process of ranking is done by defining elements based on their defuzzification values. Experts agree that the most important element is the most important place to make a decision (Fortemps &amp; Roubens, 1996)</p>
<p>4. The determination of threshold value "d"</p>	<p>The significance of the threshold value cannot be overstated (Thomaidis, Nikitakos &amp; Dounias, 2006). Using the formula: <math>m = (m1, m2, m3)</math>, we can calculate the</p>		

	distances between each of the three fuzzy integers: $d(\bar{m}, \bar{n}) = \frac{1}{\sqrt{3}} [(m1 - n1)^2 + (m2 - n2)^2 + (m3 - n3)^2]$		
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### Sampling Procedure

Purposive sampling is used in this study. This method is appropriate for the researcher's goal of obtaining predetermined expert consensus. Purposive sampling is the preferred technique in the Fuzzy Delphi Method, according to Hasson, Keeney, and McKenna (2000). In addition, nine experts participated in this investigation. Those who have consented to participate are shown in Table 1. These experts were chosen for their qualifications and experience. For this analysis, a team of five to ten professionals is necessary, depending on the specific expertise of each participant. Delphi experts typically range from 10 to 15 when there is any regularity (Adler & Ziglio, 1996). Therefore, this study used 9 experts for the purpose of item validation, in addition to being sufficient to perform the Fuzzy Delphi analysis process.

### Experts Criteria

According to Booker and Mc Namara (2004), experts are individuals that have put in the time and effort to acquire the necessary credentials, training, experience, professional affiliation, and peer endorsement (Nikolopoulos, 2004; Perera et al., 2012). "Expert" is defined as "someone who has knowledge and skill in a particular field or industry" (Cantrill, Sibbald, and Buetow, 1996; Mullen, 2003). In Fuzzy Delphi research, the selection of experts is a crucial consideration. If the selection of experts is done incorrectly and based on criteria, the study's legitimacy, validity, and reliability may be challenged (Mustapha & Darusalam, 2017). As stated by Kaynak and Macauley (1984), the experts who participate in the research must represent or have a working knowledge of the subject matter. The researcher selects specialists based on a set of extremely tough criteria, including those with at least seven years of experience and those who are right in their field of knowledge and in relation to the study.

### Instrumentation/Material for Validation

In order to build the Fuzzy Delphi research instrument, the researcher consulted relevant literature. It is possible for researchers to construct questionnaire items based on literature, pilot studies, and their own experiences (Skulmowski et al., 2007). Because of this, they turned to academic research, expert interviews, and focus groups when crafting questions for the Fuzzy Delphi method (Mustapha & Darussalam, 2017). As Okoli and Pawlowski (2004) say, the development of research items and content should begin with a review of relevant literature, as well as the collection of data. In the context of this study, the researcher wanted to re-validate the existing items (see table 1). Only in this study, the researcher used a method that is quite different from the previous study which is to use the Fuzzy Delphi method. Therefore, researchers used previously published work and literature to construct a list of Islamophobia Scale. After that, a list of expert questions is compiled with the use of a 7-point scale. It was decided to utilise a 7-point scale since the more scales that were used, the more precise and accurate the results were (Chen et al., 2011). In order to make it less difficult for professionals to respond to the questionnaire, the researcher replaced the fuzzy value in Table 4 with a scale value ranging from 1 to 7, as is shown:

Table 3

*Fuzzy scale*

Item	Fuzzy number
Strongly disagree	(0.0, 0.0, 0.1)
Disagree	(0.0, 0.1, 0.3)
Somewhat Disagree	(0.1, 0.3, 0.5)
Neutral	(0.3, 0.5, 0.7)
Somewhat agree	(0.5, 0.7, 0.9)
Agree	(0.7, 0.9, 1.0)
Strongly agree	(0.9, 1.0, 1.0)

Table 1

*Islamophobia scale*

No	Item
1	I would support any policy that would stop the building of new mosques (Muslim place of worship)
2	If possible, I would avoid going to places where Muslims would be.
3	I would become extremely uncomfortable speaking with a Muslim
4	Just to be safe, it is important to stay away from places where Muslims could be
5	I dread the thought of having a professor that is Muslim.
6	If I could, I would live in a place where there are no Muslims
7	Muslims should not be allowed to work in places where many people gather
8	Islam is a dangerous religion
9	The religion of Islam supports acts of violence
10	Islam supports terrorist acts.
11	Islam is an evil religion
12	Islam is a religion of hate
13	I believe that Muslims support the killings of non-Muslims.
14	Muslims want to take over the world.

Sources : Lee et al (2009)

**Findings**

*This section will provide an expert consensus on Islamophobia Scale validation. 9 experts in the respective fields were asked to participate in a Fuzzy Delphi exercise, and the results were compiled based on their responses. Here are the findings of the study:*



Table 2

Fuzzy Delphi analysis result 1

Expe rts	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14
Expe rt1	0.10 906	0.05 774	0.17 962	0.03 849	0.04 491	0.02 566	0.01 925	0.07 057	0.08 34	0.07 057	0.04 491	0.07 698	0.05 132	0.05 132
Expe rt2	0.10 906	0.11 547	0.06 415	0.03 849	0.04 491	0.08 34	0.07 698	0.01 283	0.03 208	0.04 491	0.04 491	0.09 623	0.00 642	0.00 642
Expe rt3	0.05 132	<b>0.28</b> <b>868</b>	0.05 132	0.03 849	<b>0.30</b> <b>151</b>	0.02 566	0.09 623	0.01 283	0.08 34	0.07 057	0.04 491	0.03 849	0.05 132	0.00 642
Expe rt4	<b>0.41</b> <b>056</b>	0.05 774	0.06 415	0.03 849	0.04 491	0.08 981	0.01 925	0.01 283	0.08 34	0.04 491	0.04 491	0.07 698	0.00 642	0.00 642
Expe rt5	0.10 906	0.05 774	0.05 132	0.09 623	0.04 491	0.02 566	0.07 698	0.10 264	0.03 208	0.07 057	0.10 264	0.03 849	0.00 642	0.00 642
Expe rt6	0.06 415	0.11 547	0.05 132	0.19 245	0.10 264	0.08 34	0.09 623	0.10 264	0.03 208	<b>0.27</b> <b>585</b>	0.18 604	0.03 849	0.00 642	0.12 189
Expe rt7	0.05 132	0.17 321	0.10 906	0.07 698	0.07 057	0.08 981	0.09 623	0.01 283	0.03 208	0.04 491	0.07 057	0.19 245	0.12 189	0.00 642
Expe rt8	0.10 906	0.05 774	0.10 906	0.07 698	0.04 491	0.08 981	0.01 925	0.01 283	0.03 208	0.12 83	0.04 491	0.09 623	0.00 642	0.05 132
Expe rt9	0.06 415	0.11 547	0.06 415	0.09 623	0.04 491	0.02 566	0.07 698	0.07 057	0.08 981	0.07 057	0.07 057	0.03 849	0.05 132	0.05 132

Table 3

Result 2

Value of the item	0.119 75	0.115 47	0.082 68	0.076 98	0.082 69	0.059 87	0.064 15	0.045 62	0.055 6	0.091 24	0.072 71	0.076 98	0.034 22	0.034 22
Value of the "d" constr uct	0.0723													
Item < 0.2	8	8	9	9	8	9	9	9	9	8	9	9	9	9
% of item < 0.2	88%	88%	100%	100%	88%	100%	100%	100%	100%	88%	100%	100%	100%	100%
Average of consensu s	96%													
Defuzzific ation	0.811 11	0.8 11	0.811 11	0.833 33	0.822 22	0.855 56	0.866 67	0.877 78	0.844 44	0.777 78	0.822 22	0.833 33	0.911 11	0.911 11
Ranking	8	9	8	6	7	4	3	2	5	10	7	6	1	1
Status	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt	Acce pt

After processing the data, the analysis shows that the bold threshold value is greater than the threshold value of 0.2 (> 0.2). (see table 2). To put it another way, there are experts whose opinions do not match or even agree on some things. On the other hand, the average threshold value (d) for all Islamophobia items is below 0.2 (see table 3). If the average (d) value is less than 0.2, it means that experts agree on the item a lot (Cheng & Lin, 2002; Chang, Hsu & Chang, 2011). The total percentage of expert agreement is 97 percent, which is more than (>75 percent) 97 percent and shows that the requirements for expert agreement on this item have been met.

Table 4

Final result of Islamophobia item revalidation

Islamophobia item	Early item rank	New item rank	Islamophobia
	ISLM13	ISLM1	I believe that Muslims support the killings of non-Muslims.
	ISLM14	ISLM1	Muslims want to take over the world.
	ISLM8	ISLM2	Islam is a dangerous religion
	ISLM7	ISLM3	Muslims should not be allowed to work in places where many people gather
	ISLM6	ISLM4	If I could, I would live in a place where there are no Muslims
	ISLM9	ISLM5	The religion of Islam supports acts of violence
	ISLM4	ISLM6	If I could, I would live in a place where there are no Muslims
	ISLM12	ISLM6	Islam is a religion of hate
	ISLM5	ISLM7	I dread the thought of having a professor that is Muslim.
	ISLM11	ISLM7	Islam is an evil religion
	ISLM1	ISLM8	I would support any policy that would stop the building of new mosques (Muslim place of worship)
	ISLM3	ISLM8	I would become extremely uncomfortable speaking with a Muslim
	ISLM2	ISLM9	If possible, I would avoid going to places where Muslims would be.
ISLM10	ISLM10	Islam supports terrorist acts.	

### Conclusion

The goal of this study was to revalidate a scale used to measure islamophobia. Using the Fuzzy Delphi Method, a firm process was used to revalidate the dimensions of Islamophobia and come up with a valid scale. Results from the defuzzification process, threshold “d” value, and percentage of experts agreement (consensus), show that all items reach consensus and are valid through the expert judgements process. All processes used in this study are in line with the method used in the Fuzzy delphi method. Therefore, the data obtained show that the items that have been validated meet the required criteria. In particular, this study provides a new input in the validation process. In conducting the validation process on items, most researchers use factor analysis, but there are also other methods that can be utilized by researchers. The variety of methods is able to provide a new insight into the world of academic writing, especially related to the vaditation process. However, this study also has its own limitations that the researcher only uses experts in Malaysia only. In the future researchers can carry out the same process by using experts in different places to get more extensive information. future studies, researchers can use other validation methods such as CVi, CVR, ISM and other other methods related to expert agreement.

### References

- Adler, M., & Ziglio, E. (1996). *Gazing into the Oracle: The Delphi method and its application to social policy and public health*: Jessica Kingsley Publisher
- Amer, M. M., & Bagasra, A. (2013). Psychological research with Muslim Americans in the age of Islamophobia: Trends, challenges, and recommendations. *American Psychologist*, 68(3), 134.

- Allen, C., and Nielsen, J. S. (2002). "Summary Report on Islamophobia in the EU after 11 September 2001." *European Monitoring Centre on Racism and Xenophobia*. Retrieved May 18, 2017 ([http://www.pedz.uni-mannheim.de/daten/edz-b/ebr/05/Synthesis-report\\_en.pdf](http://www.pedz.uni-mannheim.de/daten/edz-b/ebr/05/Synthesis-report_en.pdf)).
- Benitez, J. M., Martin, J. C., & Roman, C. (2007). Using fuzzy number for measuring quality of service in the hotel industry. *Tourism management*, 28(2), 544-555.
- Booker, J. M., & McNamara, L. A. (2004). Solving black box computation problems using expert knowledge theory and methods. *Reliability Engineering & System Safety*, 85(1-3), 331-340
- Bodjanova, S. (2006). Median alpha-levels of a fuzzy number. *Fuzzy Sets and Systems*, 157(7), 879-891. doi: 10.1016/j.fss.2005.10.015
- Bravo, G. A., & Castello, J. V. (2021). Terrorist attacks, Islamophobia and newborns' health. *Journal of health economics*, 79, 102510.
- Cantrill, J. A., Sibbald, B., & Buetow, S. (1996). The Delphi and nominal group techniques in health services research. *International Journal of Pharmacy Practice*, 4(2), 67-74.
- Dwyer, C. (1999). Veiled meanings: Young British Muslim women and the negotiation of differences [1]. *Gender, Place and Culture: A Journal of Feminist Geography*, 6(1), 5-26.
- Fortemps, P., & Roubens, M. (1996). Ranking and defuzzification methods based on area compensation. *Fuzzy sets and systems*, 82(3), 319-330.
- Githens-Mazer, J., & Lambert, R. (2010). *Islamophobia and anti-Muslim hate crime: A London case study*. European Muslim Research Center, University of Exeter
- Hancock, C. (2015). 'The Republic is lived with an uncovered face'(and a skirt):(un) dressing French citizens. *Gender, Place & Culture*, 22(7), 1023-1040.
- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*. <https://doi.org/10.1046/j.1365-2648.2000.t01-1-01567.x>
- Hopkins, P. (2019). Social geography I: intersectionality. *Progress in Human Geography*, 43(5), 937-947.
- Hsieh, T. Y., Lu, S. T., & Tzeng, G. H. (2004). Fuzzy MCDM approach for planning and design tenders selection in public office buildings. *International Journal of Project Management*. <https://doi.org/10.1016/j.ijproman.2004.01.002>
- Kaynak, E., & Macaulay, J. A. (1984). The Delphi technique in the measurement of tourism market potential. *Tourism Management*, 5(2), 87-101
- Lee, S. A., Gibbons, J. A., Thompson, J. M., & Timani, H. S. (2009). The Islamophobia Scale: Instrument development and initial validation. *International Journal for the Psychology of Religion*, 19(2), 92-105.
- Lee, S. A. (2009). Measuring individual differences in trait sympathy: Instrument construction and validation. *Journal of Personality Assessment*, 91, 568-583. doi:10.1080/00223890903228620
- McGinty, A. M. (2012). "Teaching Against Culture" in Geography of Islam. *The Professional Geographer*, 64(3), 358-369.
- Mullen, P. M. (2003). Delphi: myths and reality. *Journal of health organization and management*. Vol. 17 No. 1, pp. 37-52. <https://doi.org/10.1108/14777260310469319>
- Mustapha, R., & Darusalam, G. (2017). *Aplikasi kaedah Fuzzy Delphi dalam Kajian Sians Sosial*. Penerbitan Universiti Malaya. Kuala Lumpur
- Najib, K., & Hopkins, P. (2020). Where does Islamophobia take place and who is involved? Reflections from Paris and London. *Social & Cultural Geography*, 21(4), 458-478.

- Nadeau, F., & Helly, D. (2016). Une extrême droite en émergence? Les pages Facebook pour la charte des valeurs québécoises. *Recherches sociographiques*, 57(2-3), 505-521.
- Nikolopoulos, K. (2004). Elicitation of expert opinions for uncertainty and risk. *International Journal of Forecasting* (Vol. 20).
- Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: an example, design considerations and applications. *Information & management*, 42(1), 15-29.
- Odartey-Wellington, F. (2009). Racial profiling and moral panic: Operation thread and the Al-Qaeda sleeper cell that never was. *Global Media Journal*, 2(2), 25.
- Perera, A. H., Drew, C. A., & Johnson, C. J. (2012). *Expert Knowledge and Its Application in Landscape Ecology*. Springer, New York, 1–11. <http://doi.org/10.1007/978-1-4614-1034-8>
- Ridhuan, M. J., Saedah, S., Zaharah, H., Nurulrabihah, M. N., & Arifin, S. (2014). *Pengenalan asas kaedah Fuzzy Delphi dalam penyelidikan rekabentuk pembangunan*. Minda Intelek Agency.
- Skulmoski, G. J., & Hartman, F. T. (2007). The Delphi Method for Graduate Research. *Journal of Information Technology Education*, 6(1), 1–21. doi:10.1.1.151.8144
- Thomaidis, N. S., Nikitakos, N., & Dounias, G. D. (2006). The evaluation of information technology projects: A fuzzy multicriteria decision-making approach. *International Journal of Information Technology and Decision Making*. <https://doi.org/10.1142/S0219622006001897>
- Uenal, F., Bergh, R., Sidanius, J., Zick, A., Kimel, S., & Kunst, J. R. (2021). The nature of Islamophobia: A test of a tripartite view in five countries. *Personality and Social Psychology Bulletin*, 47(2), 275-292.
- Wilkins-Laflamme, S. (2018). Islamophobia in Canada: Measuring the realities of negative attitudes toward Muslims and religious discrimination. *Canadian Review of Sociology/Revue canadienne de sociologie*, 55(1), 86-110.

#### Appendix A : Islamophobia Scale Re-validation version

1	I believe that Muslims support the killings of non-Muslims.
2	Muslims want to take over the world.
3	Islam is a dangerous religion
4	Muslims should not be allowed to work in places where many people gather
5	If I could, I would live in a place where there are no Muslims
6	The religion of Islam supports acts of violence
7	If I could, I would live in a place where there are no Muslims
8	Islam is a religion of hate
9	I dread the thought of having a professor that is Muslim.
10	Islam is an evil religion
11	I would support any policy that would stop the building of new mosques (Muslim place of worship)
12	I would become extremely uncomfortable speaking with a Muslim
13	If possible, I would avoid going to places where Muslims would be.
14	Islam supports terrorist acts.