



Indonesian Ulema Council Fatwa on Religious Activities During the COVID-19 Pandemic: An Investigation of Muslim Attitudes and Practices

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Accepted: 12 August 2022 / Published online: 27 August 2022

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Abstract

This cross-sectional study was conducted on 1139 Muslims in Indonesia. Attitudes and practices were assessed using a questionnaire developed by researchers referring to the main points of the Indonesian Ulema Council fatwa on religious activities during the COVID-19 pandemic. The findings suggest that most participants held positive attitudes (86.5%) and engaged in practices (76.4%). The regression analysis also indicates that attitudes explained approximately 31.5% of the variance in the practice score and 11.2% in the practice score while controlling for gender, age, residence, and education. The study reveals that understanding the relationship between sociodemographic variables, attitudes, and practices is relevant to implementing government policies related to religious practices during the COVID-19 pandemic.

Keywords Demographic variable · Attitude · Religious practice · Indonesian Ulema Council · COVID-19

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Introduction

Recently, the coronavirus disease 2019 (COVID-19) pandemic has been a prevalent issue as a global health problem throughout the world. It is evident from recently published research that COVID-19 has had enormous impacts on many life sectors, such as health care, economic and social trends (Haleem et al., 2020), and even religious practices. In Indonesia, COVID-19 was first detected on March 1, 2020, with the case of two positive people in the city of Depok, West Java, a buffer zone of Jakarta. As the capital city of Indonesia, Jakarta has now become the epicenter of COVID-19, and all provinces in Indonesia have reported positive cases of COVID-19.

In response to this increasingly severe health crisis, the president of the Republic of Indonesia declared the COVID-19 pandemic a national disaster by Presidential Decree 7/2020. This declaration was then followed by the establishment of a large-scale social restriction (Pembatasan Sosial Berskala Besar/PSBB) policy in Jakarta and buffer zones, such as Depok city and Bekasi city (West Java) as well as Tangerang city (Banten). With this status, the government of the Republic of Indonesia has imposed restrictions on public activities throughout Indonesia. Residents have been asked to stay home, work from home, study from home, pray from home, maintain a social distance and physical distance, and avoid crowds. This policy is considered a way to break the chain of COVID-19 transmission (Brooks et al., 2020).

In Indonesia, COVID-19 has had a significant impact on the practice of religious life. Even worse, the effects of COVID-19 on the practice of religious life have been problematic since Indonesia encompasses the largest Muslim population in the world with diverse ethnic, educational, economic, and cultural characteristics. Therefore, government policy is an essential key to anticipating such a problem. Saudi Arabia was a country that responded to COVID-19 quickly by issuing policies related to religious practices such as pilgrimages, umrah, and other worship activities (Yezli & Khan, 2020). However, the characteristics of the people of Saudi Arabia differ significantly from those of Indonesia; thus, different policies are needed. The determination of government policy certainly impacts Muslim religious activities that involve many people, for example, praying five times together, Friday prayers, general speech assemblies, and sermons in mosques.

The Indonesian community has responded in various ways to this policy. For example, some have agreed with it considering the health aspects. In contrast, others have disagreed with it because they believe it weakens Muslim religious activities. Responding to the advantages and disadvantages of the situation at the grassroots level, the Indonesian Ulama Council (Majelis Ulama Indonesia/MUI) issued a fatwa, Number 14 of 2020, concerning religion in the situation of the COVID-19 pandemic (Komisi Fatwa MUI, 2020).

Based on Sharia provisions, the MUI called this fatwa a religious guide for the community, especially Muslims, to continue to perform religious activities and pay attention to health protocols for COVID-19 prevention. As a community of

religious leaders, the MUI can be an essential resource for managing and controlling COVID-19 in Indonesia while taking a collaborative approach with the government (Lee et al., 2021). The religious leaders of the MUI are the most respected figures in Indonesia, and their influence on Muslims can be very beneficial in the fight against COVID-19 (Hashmi et al., 2020). Based on the explanation of Yoosefi Lebni et al. (2021) that the MUI is a collection of clerics, it is an essential social asset in society that can be used effectively during the COVID-19 health crisis.

Resistance to COVID-19 receives full and unanimous support from the community, especially those Muslim and the majority of the population. To handle COVID-19, the scenario follows the government's target; Muslims' fulfillment of the MUI's fatwa is an absolute necessity. Based on Knowledge, Attitude, and Practice (KAP) theories, attitudes and practices influence actions that reflect a community's compliance with standards (Alzghoul & Abdullah, 2015; Wan, 2014). A person's intention to comply with the MUI's fatwa is a function of their attitude toward practices. In the current study, religious practices related to the early prevention of COVID-19 largely depend on attitudes. A positive attitude toward religious leaders' instruction leads to good spiritual practices for preventing and controlling the virus (Asmelash et al., 2020; Zehra et al., 2020).

Based on the latest reports, Muslims have negative attitudes toward and bad practices regarding the MUI fatwa's related to COVID-19 (Jauhari & Ghoni, 2020; Pabbajah et al., 2020). Nevertheless, they continue to carry out several religious activities that bring together large masses of people, which allegedly strongly and significantly contribute to the risk of COVID-19 transmission and infection (Lee et al., 2021). We can take important lessons from previous disease control events (Driessche et al., 2009), especially the 2003 severe acute respiratory syndrome (SARS) outbreak, during which there were reports of community non-compliance with the necessary measures determined by the government, only making matters more complex and complicated (Person et al., 2004). To ensure Indonesian Muslims have positive attitudes toward and practices about the MUI's fatwa and participate in assisting the government in suppressing positive cases of the COVID-19 pandemic, more explorations of attitudes and religious practices during the COVID-19 pandemic are urgently needed. The findings can be used as a catalyst to evaluate the effectiveness of the fatwa. In addition, they can become the basis for the government to formulate other strategies.

Furthermore, demographic characteristics are determinant factors in society for adopting a coping response during the pandemic (Park et al., 2020). Demographic variables have been studied regarding attitudes and practices during the COVID-19 pandemic. For instance, previous research has identified KAP associations with gender, age, education, occupation, place of residence, and religion in Indonesia (Saefi et al., 2020; Ulhaq et al., 2020). Reports on people's attitudes toward and practices about the MUI's fatwas have been extensively documented (Darmawan et al., 2020; Hidayaturrahman et al., 2021; Ruhana & Burhani, 2020), but there is a lack of research investigating such issues using demography as an additional variable. Moreover, published research on the community's attitudes toward and practices about religious leaders' commands regarding religious practices during the

pandemic based on demographic variables, particularly in Indonesia, seems sparse. Therefore, this study aims to evaluate the attitudes and practices of Muslims regarding their religious activities and to explore the relationship between the demographics, attitudes, and religious practices of Muslims in Indonesia during the COVID-19 pandemic.

Method

Participants

The present study employed a cross-sectional survey design for data collection. Cross-sectional designs are used for population-based surveys, and this survey design aimed to evaluate the self-reported attitudes and practices regarding the MUI's fatwa about sociodemographic variables. The survey was conducted in April 2020, a month after the government of the Republic of Indonesia declared the COVID-19 pandemic a national disaster and shortly after the regional government of Jakarta established the PSBB, followed by the establishment of the buffer zones of Jakarta on April 15, 2020. This survey was conducted online because community-based sampling was not possible.

A set of questionnaires was disseminated via Google Forms through WhatsApp contacts and groups, relying on the researchers' networks and local people residing in East Java, West Java, Banten, and Jakarta. The link contained a brief introduction to the background of the study, its objectives, and the procedures for filling out the questionnaire. The participants' participation was voluntary and kept confidential during the survey. This questionnaire was intended for Muslim respondents aged 16 years or older willing to participate in this study. The questionnaire mainly targeted participants from East Java, West Java, Banten, and Jakarta Provinces (the four provinces with the highest number of positive cases of COVID-19). However, we did not limit the sample to residents of these four provinces. Residents outside the four provinces were permitted to participate if they were willing and eligible.

Questionnaire

The questionnaire consisted of three parts: demographics, attitudes, and practices. The demographic variables included gender, age, residence, education, occupation, and religious orientation. In addition, the researchers investigating the MUI's fatwas (Nos. 14, 23, and 28 of 2020, released in mid-March until the beginning of May) developed the questionnaire to capture the attitudes and practices regarding religious practices in the COVID-19 pandemic. This questionnaire encompassed 21 questions consisting of 14 attitude questions (A1–A14) and seven practice questions (P1–P7).

Attitudes can be defined as an individual's feelings (agreement, neutrality, or disagreement) toward a specific behavior (Gasper et al., 2019). Attitudes were measured with multi-item questionnaires (psychometric scales) (Baždarić et al., 2021). For example, questions A1–A8 asked about religious and social activities in daily

life. In contrast, questions A9–A14 asked about activities during the Ramadan and Eid celebrations, including the barriers to practices and self-motivation. The attitude questions used a 5-point Likert ranging from 1 to 5 to indicate an attitude of substantial disagreement to an attitude of strong agreement. The total attitude score went from 14 to 70 points, with a higher score indicating a higher attitude of agreement.

Meanwhile, practice is defined as the actual application or use of the MUI's fatwa in religious activities. The practice questions were answered with a choice of "yes" or "no." "No" answers were given 1 point, and "yes" responses were given 0 points, except for Items P5 and P7. Prevention efforts were included. The total practice score ranged from 0 to 7, with a higher score indicating a higher level of practice. The Cronbach's alpha coefficient of the attitude and practice questions reached 0.9, demonstrating the instrument's excellent reliability (George & Mallery, 2002). The questionnaire items and answer choices are presented in Table 1.

Statistical Analysis

The participants' responses showing their attitudes and practices regarding the MUI's fatwa were explained in frequency and percentage. We used an independent sample *t* test and a one-way analysis of variance (ANOVA) to examine the differences in the attitude and practice scores based on demographic characteristics. A hierarchical multiple regression approach was also employed to explore the relationship between the demographic variables as independent variables and the dependent variable, i.e., the attitude scores and practices, simultaneously based on a large sample size. This approach aimed to identify the amount of variance explained by all the independent variables combined. This analysis approach was carried out with gender and other independent variables, such as age, residence, education, work, and religious orientation. To calculate the practice score dependent variable, we added the attitude score as an independent variable to the demographic factors. We attempted to determine how much attitudes contribute to practices.

Ethical Considerations

Ethical clearance was secured from the institutional research board of Universitas Negeri Malang. The purpose and importance of the study were explained, and written consent was obtained from each participant. The respondents' participation was utterly consensual, anonymous, and voluntary. Data collection was conducted in-line with the Declaration of Helsinki.

Results

In this study, 1152 participants completed the survey questionnaire. Thirteen were excluded because they did not fully complete the questionnaire, so the total final sample was 1139 participants. In this final sample, 638 (56.0%) were participants in the 16–29 age group, 588 (51.6%) were men, 588 (51.6%) were residents of East

Table 1 Attitude and practice questions regarding the MUI's fatwa about COVID-19 prevention

Questions	MUI's Fatwa	Options
A1. Do you agree with the MUI's fatwa stating that everyone is obliged to maintain health and avoid anything that can cause exposure to disease?	MUI Fatwa Number 14 of 2020, Article 2.1	Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5)
A2. Do you agree with the MUI's fatwa stating that people exposed to the coronavirus (COVID-19) must isolate themselves so that transmission to others does not occur?	MUI Fatwa Number 14 of 2020, Article 2.2	
A3. Do you agree with the MUI's fatwa, which states that Muslims must obey and support government policies that isolate and treat people exposed to COVID-19?	MUI Fatwa Number 14 of 2020, Article 3.2	
A4. Do you agree if the people in the affected area perform prayers in <i>mak-tubah</i> (5 times) in their homes?	MUI Fatwa Number 14 of 2020, Article 2.3	
A5. Do you agree if the community in the affected area performs the mid-day prayer at home instead of Friday prayers?	MUI Fatwa Number 14 of 2020, Article 2.4	
A6. Do you agree if the people in the affected area do not conduct religious worship activities that involve many people, such as public recitals, <i>majlis taklim</i> , and <i>tahlilan</i> ?	MUI Fatwa Number 14 of 2020, Article 2.5	
A7. Do you agree if there are super strict restrictions on the entry and exit of people and goods from and to foreign countries, except medical personnel and essential goods?	MUI Fatwa Number 14 of 2020, Article 3.1	
A8. Do you agree that the management of bodies exposed to COVID-19, especially in bathing and caring, must follow medical protocols and be carried out only by the authorities?	MUI Fatwa Number 14 of 2020, Article 2.7	
A9. Do you agree with the call for tarawih prayers to be done individually or in a congregation with families in their homes?		
A10. Do you agree with the ban on implementing <i>Nuzulul Quran</i> warnings in the form of <i>Tabligh Akbar</i> by presenting prominent speakers and crowds?	MUI Fatwa Number 14 of 2020, Article 2.3	

Table 1 (continued)

Questions	MUI's Fatwa	Options
A11. Do you agree with the prohibition on carrying out the activities of lightning boarding schools, tarawih roving, and roving <i>takbir</i> that gather en masse?	MUI Fatwa Number 14 of 2020, Article 2.2	
A12. Do you agree with the ban on joint opening activities and joint meals at mosques, government institutions, and other places?	MUI Fatwa Number 14 of 2020, Article 2.2 dan 2.4	
A13. Do you agree with the call for Eid al-Fitr to be done through social media and video calls/conferences?	MUI Fatwa Number 14 of 2020, Article 2.1	
A14. Do you agree with the call for collecting <i>Zakat Fitr</i> and ZIS (<i>Zakat, Infaq, Sadaqah</i>) through <i>zakat</i> pickup services and banking service transfers?	MUI Fatwa Number 28 of 2020 strengthened by MUI Fatwa Number 24 of 2021, article E.2 MUI Fatwa Number 23 of 2020	
<i>Practices</i>		
P1. Do you continue to pray five times in a congregation at the mosque or mosque?	MUI Fatwa Number 14 of 2020, Article 2.2	Yes, no
P2. Do you still carry out Friday prayers?	MUI Fatwa Number 14 of 2020, Article 2.2	
P3. Will you continue to attend religious activities such as <i>majlis taklim</i> and general recitals?	MUI Fatwa Number 14 of 2020, Article 2.2	
P4. Do you take care of COVID-19 victims or go to the funeral when a family member or neighbor exposed to COVID-19 dies?	MUI Fatwa Number 14 of 2020, Article 2.7	
P5. Will you receive your neighbor or family member recovering from COVID-19?	MUI Fatwa Number 14 of 2020, Article 2.2	
P6. Are you still going home (coming home) before Eid al-Fitr despite the solid call for the delay?	MUI Fatwa Number 14 of 2020, Article 2.2	
P7. Do the managers of houses of worship around your place of residence implement strict health protocols?	MUI Fatwa Number 14 of 2020, Article 3.3	

Table 2 Demographic distribution of the participants

Criteria	Groups	<i>N</i>	Percentage (%)
Gender	Female	551	48.4
	Male	588	51.6
Age group (years)	16–29	638	56.0
	30–49	341	30.0
	50+	160	14.0
Place of current residence	Jakarta	191	16.8
	Banten	69	6.1
	West Java	251	22.0
	East Java	588	51.6
	Other	40	3.5
Education	Middle school or below	412	36.2
	Bachelor's degree	397	34.8
	Master's degree or above	330	29.0
Occupation	Academics	837	73.5
	Nonacademics	302	26.5
Religious orientation	Nahdlatul Ulama	770	67.6
	Muhammadiyah	129	11.3
	Other	240	21.1

Java, 412 (36.2%) had a high school education or lower, 837 (73.5%) worked as academics, and 770 (67.6%) were oriented toward the Nahdlatul Ulama (NU) religion. Detailed information about the sample characteristics can be found in Table 2.

Level of Attitudes and Practices

The response rates were measured with the 14 questions on attitudes toward the MUI's fatwa related to religious practices in the COVID-19 pandemic, ranging from 67.2% (Item A13) to 99.4% (Item A2) (Fig. 1). The average total score of 60.57 (SD: 7.24, range 35–70) shows an overall level of agreement with the MUI's fatwa of 86.5% ($60.57/70 * 100$). If the total score of each respondent is converted back to the 1–5 scale, then 590 respondents (51.8%) agreed (score 4), and 484 respondents (42.5%) strongly agreed (score 5). Thus, 65 respondents (5.7%) disagreed with the MUI's fatwa. Approximately 1074 (94.2%) participants stated they agreed with or had a positive attitude toward the MUI's fatwa.

The level of practices measured from seven questions about the holding of worship services in the COVID-19 pandemic based on the MUI's fatwa was in the range of 57.8% (Item P2) to 87.9% (Item 1) (Fig. 2). The average total score of 5.35 (SD: 1.42, range 0–7) shows that the level of practice about the comprehensive MUI fatwa was 76.4% ($5.35/7 * 100$). If the total score of each respondent is converted to the numbers 0 and 1, then 999 (87.7%) respondents complied with the MUI's fatwa, and 140 (12.3%) were non-compliant.

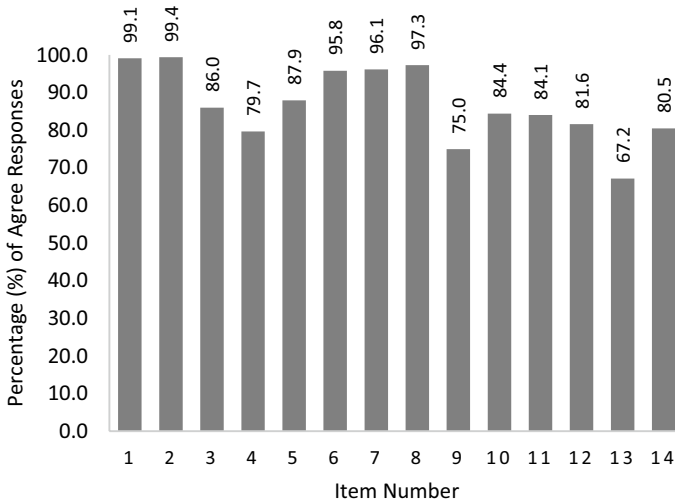


Fig. 1 Percentage of responses (agree and strongly agree) to each question item

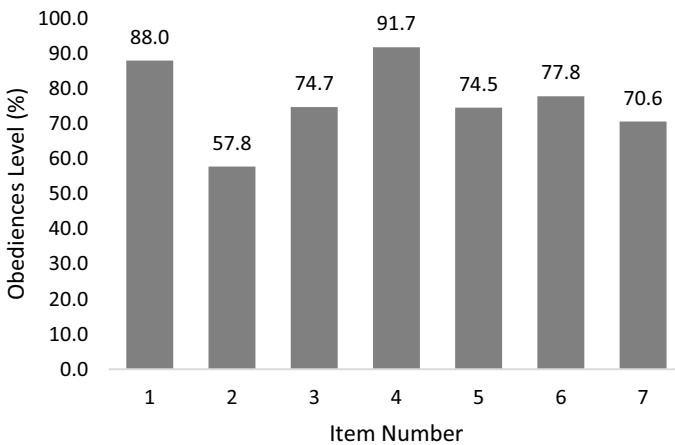


Fig. 2 Level of practices (%) about the MUI’s Fatwa

Attitude and Practice Differences by Demographic Variables

Based on several demographic variables, the differences in the means of the attitude and practice scores can be found in Tables 1 and 2, respectively. The ANOVA results indicated that only age groups, residence, and educational level presented statistically significant differences in attitude scores. Therefore, in a post hoc analysis of scores by age group, the region where the participant was living, and educational level, pairwise comparisons with Fisher’s least significant difference (LSD) test were used.

Table 3 Attitudes toward the MUI's fatwa by demographic variables

Characteristics	Attitude score (mean \pm SD)	<i>t</i> / <i>F</i>
<i>Gender</i>		
Male	60.65 \pm 7.75	0.109
Female	60.50 \pm 6.67	
<i>Age group (years)</i>		
16–29	58.78 \pm 7.14	53.251**
30–49	62.25 \pm 7.10	
50+	64.20 \pm 5.62	
<i>Place of current residence</i>		
Jakarta	62.05 \pm 6.68	19.381**
Banten	59.61 \pm 8.96	
West Java	63.24 \pm 6.39	
East Java	58.99 \pm 7.18	
Other	61.87 \pm 6.16	
<i>Education</i>		
Middle school or below	58.06 \pm 7.36	60.683**
Bachelor's degree	60.61 \pm 6.93	
Master's degree or above	63.67 \pm 6.23	
<i>Occupation</i>		
Academics	60.81 \pm 7.03	3.323
Nonacademics	59.93 \pm 7.78	
<i>Religious orientation</i>		
Nahdlatul Ulama	60.54 \pm 7.21	0.178
Muhammadiyah	60.39 \pm 7.23	
Other	60.81 \pm 7.35	

** $p < 0.01$

The results indicated significant differences in the attitude scores of persons aged 50+ years and the other groups (50+ vs. 16–29 mean difference = 5.4, $p = 0.000$; 50+ vs. 30–49 mean difference = 1.9, $p = 0.003$). Participants from the 50+ group presented higher levels of attitude. Meanwhile, the other results in this study indicated significant differences in the attitude scores of persons from West Java and the other regions (West Java vs. Banten mean difference = 3.6, $p = 0.000$; West Java vs. East Java mean difference = 4.3, $p = 0.000$). No significant mean differences were found between persons from West Java and those from Jakarta (mean difference = 1.2, $p = 0.078$) or other regions (mean difference = 1.4, $p = 0.253$). The participants from West Java presented higher levels of attitude. Lastly, this study indicated significant differences in the attitudes scores of persons with a master's degree or above and the other groups (master's degree or above versus bachelor's degree mean difference = 3.1, $p = 0.000$; master's degree or above versus middle school or below mean difference = 5.6, $p = 0.000$). The participants with a master's degree or above presented higher levels of attitudes (Table 3).

In addition, the ANOVA results indicated that gender, age group, residence, educational level, and occupation presented statistically significant differences in the means of the practice scores. Males showed lower mean scores than females. Academics gave higher mean scores than nonacademics. In the post hoc analysis of scores by age group, the region where the participant was living, and educational level, pairwise comparisons with Fisher's Least Significant Difference (LSD) test were used.

The results indicated significant differences in the practice scores of persons aged 50+ years versus 16–29 years (mean difference=0.2, $p=0.127$). No significant mean differences were found for persons aged 50+ years versus 30–49 years (mean difference=0.6, $p=0.000$). The participants from the 50+ group presented higher levels of practice. The same pattern was found for the practice scores by region among persons from West Java and the other regions (West Java vs. Banten mean difference=0.4, $p=0.016$; West Java vs. East Java mean difference=0.8, $p=0.000$). No significant mean differences were found between persons from West Java and those from Jakarta (mean difference=−0.2, $p=0.140$) and other regions (mean difference=0.1, $p=0.538$). The participants from Jakarta presented higher levels of practice. Lastly, this study also observed significant differences in the practice scores of persons with a master's degree or above and the other groups (master's degree or above vs. bachelor's degree mean difference=0.3, $p=0.001$; master's degree or above vs. middle school or below mean difference=0.4, $p=0.000$). The participants with a master's degree or above presented higher levels of practices (Table 4).

Demographic Variables Associated with Attitudes and Practices

Hierarchical regression analysis shows that gender did not contribute significantly to the attitude variables (Step 1). Adding the age variable to the regression model increased the variance explained. Overall, gender and age accounted for 8.9% of the variance, $F=56,379$, $p<0.01$ (Step 2). Adding several variables, such as residence, education, work, and religious orientation, gradually increased R^2 . Still, religious orientation's regression coefficient β for religious orientation was insignificant (Steps 3–6). The six characteristics (gender, age, place of residence, education, occupation, and religious orientation) together explained 14.8% of the variance, $F=32,666$, $p<0.01$). The resulting hierarchical linear regression analysis of the variables predicting the attitude scores can be found in Table 5.

Hierarchical regression analysis shows that gender, age, residence, and education accounted for 11.2% of the variance, $F=36,873$; $p<0.01$, but the regression coefficient β for education was insignificant (Steps 1–4). A one-unit addition can increase R^2 by 12.7% of the variance. Still, the regression coefficient β for education and religious orientation is insignificant (Steps 5–6). Finally, the addition of attitude variables can significantly increase R^2 . Six characteristics (gender, age, place of residence, education, occupation, and religious orientation) together with attitudes explained 31.5% of the variance, $F=75,704$; $p<0.01$ (Step 7). The resulting hierarchical linear regression analysis of the variables predicting the practice scores can be found in Table 6.

Table 4 Attitudes and practices regarding the MUI's fatwa by demographic variables

Characteristics	Practice score (mean ± SD)	t/F
<i>Gender</i>		
Male	5.19 ± 1.56	15.424**
Female	5.52 ± 1.26	
<i>Age group (years)</i>		
16–29	5.15 ± 1.43	15.943**
30–49	5.54 ± 1.42	
50+	5.75 ± 1.38	
<i>Place of current residence</i>		
Jakarta	5.96 ± 1.18	27.704**
Banten	5.32 ± 1.41	
West Java	5.77 ± 1.21	
East Java	4.96 ± 1.50	
Other	5.63 ± 1.30	
<i>Education</i>		
Middle school or below	5.18 ± 1.41	9.887**
Bachelor's degree	5.29 ± 1.47	
Master's degree or above	5.64 ± 1.38	
<i>Occupation</i>		
Academics	5.44 ± 1.36	10.513**
Nonacademics	5.12 ± 1.60	
<i>Religious orientation</i>		
Nahdlatul Ulama	5.34 ± 1.41	0.517
Muhammadiyah	5.29 ± 1.52	
Other	5.35 ± 1.43	

** $p < 0.01$

In this study, the multiple regression equation is written in Figure 3.

Discussion

To the best of our knowledge, this study is the first attempt in Indonesia to examine Indonesian Muslims' attitudes toward and practices of the fatwa issued by the MUI, the highest Islamic religious authority in Indonesia, regarding religious practices during the COVID-19 pandemic. In this study, most Indonesian Muslims have positive attitudes toward and perceptions of the fatwa (94.3%). In addition, most take actions that reflect practices in-line with the fatwa (87.7%). These results are far higher than previous research investigating people's attitudes toward and perceptions of the MUI's fatwa, with positive attitudes accounting for 78% (Kusuma & Waluyo, 2010). This research illustrates that most Muslim communities agree with the MUI's fatwa regarding religious practices during the COVID-19 pandemic.

Table 5 Summary of hierarchical (or sequential) regression analyses of the variables explaining attitudes toward the MUI's fatwa

Variable	B	SE B	β	Adjusted R^2	F
Step 1				– 0.001	0.109
Gender	– 0.142	0.430	– 0.010		
Step 2				0.089	56.370**
Gender	1.228	0.430	0.085**		
Age	3.147	0.297	0.315**		
Step 3				0.101	43.837**
Gender	1.454	0.430	0.100**		
Age	3.055	0.295	0.306**		
Place of current residence	– 0.736	0.178	– 0.118**		
Step 4				0.132	44.317**
Gender	1.667	0.424	0.115**		
Age	1.753	0.354	0.175**		
Place of current residence	– 0.738	0.175	– 0.119**		
Education	2.007	0.313	0.223**		
Step 5				0.144	39.198**
Gender	1.386	0.427	0.096**		
Age	2.042	0.359	0.204**		
Place of current residence	– 0.802	0.174	– .0129**		
Education	1.891	0.312	0.210**		
Occupation	– 1.916	0.474	– 0.117**		
Step 6				0.148	32.666**
Gender	1.378	0.428	0.095**		
Age	2.048	0.360	0.205**		
Place of current residence	– 0.806	0.174	– 0.129**		
Education	1.891	0.312	0.210**		
Occupation	– 1.916	0.474	– 0.117**		
Religious orientation	– 0.095	0.244	– 0.011		

B = unstandardized regression coefficient; SE B = standard error of B; β = standardized regression coefficient. ** $p < 0.01$

Using multiple regression analysis is an informative step to examine the relationship of practices with regard to the MUI's fatwa with other components, such as positive attitudes and contextual factors (demography). This finding is helpful for the government and stakeholders in handling COVID-19 and identifying the target population to make policies or rules related to religion and the religious practices of societies. However, in this study, we could only explain 14.8% of the variance in positive attitudes and 31.5% in practices about the MUI's fatwa.

Multiple regression explains the variance in the dependent variable (practices) using a linear combination of the independent variables (attitudes and demographics) multiplied by the regression coefficient. This coefficient allows a result to make a predictive power comparison of each independent variable to determine the most

Table 6 Summary of hierarchical (or sequential) regression analyses of the variables explaining practices about the MUI's MUI fatwa

Variable	B	SE B	β	Adjusted R^2	F
Step 1				0.026	31.007**
Gender	0.323	0.058	0.163**		
Step 2				0.055	33.903**
Gender	0.520	0.087	0.181**		
Age	0.430	0.060	0.217**		
Step 3				0.111	48.137**
Gender	0.611	0.085	0.213**		
Age	0.393	0.058	0.198**		
Place of current residence	-0.298	0.035	-0.241**		
Step 4				0.112	36.873**
Gender	0.622	0.085	0.217**		
Age	0.324	0.071	0.164**		
Place of current residence	-0.298	0.035	-0.242**		
Education	0.106	0.063	0.059		
Step 5				0.128	34.468**
Gender	0.557	0.085	0.194**		
Age	0.392	0.072	0.198**		
Place of current residence	-0.313	0.035	-0.254**		
Education	0.079	0.062	0.044		
Occupation	-0.446	0.095	-0.137**		
Step 6				0.127	28.711**
Gender	0.558	0.086	0.194**		
Age	0.391	0.072	.0197**		
Place of current residence	-0.313	0.035	-0.253**		
Education	0.079	0.062	0.044		
Occupation	-0.446	0.095	-0.137**		
Religious orientation	0.013	0.049	0.007		
Step 7				0.315	75.704**
Gender	0.430	0.076	0.150**		
Age	0.201	0.065	0.101**		
Place of current residence	-0.238	0.031	-0.193**		
Education	-0.097	0.056	-0.054		
Occupation	-0.268	0.085	-0.082**		
Religious orientation	0.022	0.043	0.012		
Attitudes	0.093	0.005	0.468**		

B = unstandardized regression coefficient; SE B = standard error of B; β = standardized regression coefficient. ** $p < 0.01$

dominant independent variable. Based on these equations (Fig. 3), it can be inferred that the educational factor has the most substantial predictive power for the variance in attitudes. Regarding practices, attitude factors have the most predictive power.

$$\begin{aligned} \text{Attitudes} &= \beta_0 + 0.095 * \text{gender} + 0.205 * \text{age} - 0.129 * \text{residence} + 0.210 * \text{education} - \\ & 0.117 * \text{occupation} - 0.011 * \text{religious orientation} \\ \text{Practices} &= \beta_0 + 0.150 * \text{gender} + 0.101 * \text{age} - 0.193 * \text{place of residence} - 0.054 * \text{education} - \\ & 0.082 * \text{occupation} + 0.012 * \text{religious orientation} + 0.468 * \text{attitude} \end{aligned}$$

Fig. 3 Multiple regression equation of attitudes and practices

Regarding demographic characteristics, people's current place of residence has the most significant predictive power.

Most of the respondents in this study were academics (73.5%), with 63.8% holding a bachelor's degree or higher. When positive cases of COVID-19 are increasing in Indonesia, news reports are increasingly abundant. They are continually being received by people in Indonesia. All national and local television channels and social media are filled with news about the COVID-19 pandemic. One of the news concerns of the Muslim community in Indonesia is the MUI's fatwa regarding religious services in the increasingly difficult situation of the COVID-19 pandemic. Two weeks before this survey was conducted, the MUI's fatwa had become the topic most widely discussed by the wider community, especially those who worked as academics. It seems that academics are active participants in learning about the MUI's fatwa and have good knowledge of it.

Evidence shows that those with sufficient knowledge tend to have a positive attitude (Evans & Durant, 1995), including understanding the MUI's fatwa (Warsono, 2007). The positive relationship between educational level and attitude scores supports this speculation. Another study showed a direct link between exposure to infodemics in various media and anxiety during the COVID-19 pandemic (Gao et al., 2020). Therefore, an academician who uses news may have caused high psychological distress (Jain, 2021). However, the ability of academicians to think critically and find reliable information based on their knowledge has helped them to engage in healthy behavior. In other words, academic factors are critical in determining healthy behavior decisions.

In this study, the community's will to comply with the MUI's fatwa was influenced by the place of residence. In Jakarta and West Java, communities have positive attitudes and practices that align with the MUI's fatwa. This result can be attributed to a significant step in preventing the spread of COVID-19, namely, the large-scale social restrictions (PSBB) adopted by the Jakarta government and the West Java government (especially the Depok and Bekasi regions). In this situation, religious activities are restricted and prohibited in places of worship and with many worshippers. Thus, the community has no choice but to follow the procedures for conducting worship issued by the MUI.

Meanwhile, for areas outside Jakarta and West Java where the PSBB still does not apply, the prohibition on religious activities is still relatively loose and permissible. In addition, they believe that the risk of being infected with COVID-19 is lower in those areas. This can be the main trigger for the community's non-compliance with the MUI's fatwa. Another possibility is that their practices about

the MUI's fatwa were due to moral knowledge about the dangers of COVID-19 and how to prevent its transmission, considering that all participants from Jakarta and West Java have good knowledge about COVID-19. These results are similar to research on COVID-19 knowledge, attitudes, and prevention practices in China (Zhong et al., 2020). Blauza et al. (2021) state that different dimensions of psychological distance, hypothetical and geographical length, mediate the effect of knowledge on attitudes. For example, people will only comply with preventive measures if they are concerned geographically with the disease.

It should be emphasized that, in this study, a positive attitude has a significant influence on taking actions (practices) that follow the MUI's fatwa. In other words, a particular person or group with a positive attitude toward the MUI's fatwa makes this fatwa a guide in tackling COVID-19 in relation to religious practices. Furthermore, several studies have shown that there is a positive and significant correlation between attitudes and practices in terms of health (Garcia-Basteiro et al., 2016; Harapan et al., 2018; Wang et al., 2015) and the relation to the administration of Islamic religious practices (Goni et al., 2019).

This finding clearly shows the importance of building public perceptions of and positive attitudes toward the MUI as the highest religious authority in Indonesia and the fatwa as its product. Creating a positive attitude can increase general knowledge about the MUI's fatwa. For example, it can be explained to the public that the fatwa was issued by considering medical aspects (health) so that the fatwa is considered more rational. This finding further shows that strengthening public knowledge and positive perceptions will be more effective if specific demographic groups are targeted, for example, adolescents, men, poorly educated individuals, and people living in areas still low in positive cases of COVID-19.

Unfortunately, even though most participants had complied with the MUI's fatwa, some were still non-compliant (12.3%). This non-compliant behavior is related to being male, being young, working outside academia, having a low level of education, and residing outside Jakarta and West Java. In this study, we found a significant relationship between young men and the practice of non-compliance with religious practices during the COVID-19 pandemic, as indicated by a regression coefficient > 1 . Several previous studies have also stated that risk-taking behavior was related to demographic factors such as age and gender, where men tend to take more significant risks than women (Byrnes et al., 1999; Cobey et al., 2013; Langsford et al., 1998; Rolison et al., 2014) and the highest risk-taking generally occurs in the late teens (Duell et al., 2018; Turner & McClure, 2003).

In addition, several previous studies also provide evidence that specific socio-demographic characteristics (gender, age, education, occupation, and residence) predict the psychological impact of a covid-19 crisis (Brooks et al., 2020; Putinas-Neugebauer & Roland-Lévy, 2021). Academics play a crucial role in health education by providing information and knowledge to students (Barrueco et al., 2000). The studies have revealed that academics have a higher prevalence of maintaining health than the general population (Launay et al., 2010). Health information in the Jakarta area and the buffer zone is more up-to-date and accurate, so it has a lower psychological impact than the Covid-19 outbreak (Wang

et al., 2020). Also, this area has an effective channel to raise public awareness while reducing psychological stress (Chen et al., 2020).

Interestingly, regarding attitudes, the lowest positive attitude was observed for items about hospitality in using technology. Traditionally, the Ramadan exodus (called *mudik*) was performed annually by Indonesians from large cities to villages. Consequently, this issue is of particular concern because the movement of people from Jakarta and its surroundings, the COVID-19 epicenter, to other regions in Indonesia can cause COVID-19 transmission to become faster and a spike in the COVID-19 curve. For this item, the low level of positive attitudes has a high enough potential to be realized in action. There have been reports that hundreds of thousands of Jakarta residents returned home earlier despite an appeal not to do so.

Reflecting on this result, the decision of the government of the Republic of Indonesia to ban the homecoming of citizens of Jakarta and its surroundings to other regions in Indonesia is the correct and safe action. As is well known, the nature of the COVID-19 transmission vector is tied to human closeness and other social interactions (Cascella et al., 2020; World Health Organization, 2020), so social isolation is the most reliable and convergent effort to reduce the transmission of COVID-19 and to level the curve (Telles, 2020). Regarding preparedness, contingency planning and financing aspects become significant obstacles in every homecoming procession ahead of Eid al-Fitr in Indonesia (Ariani et al., 2019). This condition shows that insights from psychology are unavoidable to better understand people's attitudes and behavior during the COVID-19 pandemic to protect people more vulnerable to health problems (Putinas-Neugebauer & Roland-Lévy, 2021).

In terms of practices, the lowest level of practice in the questionnaire items was found regarding performing Friday prayers. For men, the Friday prayer is compulsory and essential worship performed once a week, right in the middle of the afternoon on Fridays. For Muslim men, changing Friday prayers in the middle of the day is not as easy as changing the five daily prayers at the mosque and then at home. They have an inner conflict that is strong enough to prevent them from complying with this fatwa. The leading cause is Islamic law regarding sanctions for not performing Friday prayers three times in a row. This speculation is supported by research findings showing that negative behavior is closely related to gender, especially being male. Related to psychological factors, religious practices seemly cannot be eliminated because they positively influence individuals' psychological well-being by helping them relieve psychological stress during COVID-19 (Peteet, 2020; Umucu & Lee, 2020).

Furthermore, regarding attitudes and practices, the demographic variables of religious orientation showed unexpected results. There were no significant differences, especially among those affiliated with the Nahdlatul Ulama and Muhammadiyah organizations. This result is undoubtedly an encouraging sign because Indonesian Muslims have no differences of opinion or support in complying with the MUI's fatwa in everyday life during the COVID-19 pandemic. A recent study shows that the two social organizations have similarities in religious orientation (Al-Ansi et al., 2019). This result can also be attributed to the support given by the leaders of the two organizations to the fatwa issued by the MUI. On the other hand, these results also reflect that there is not always a

difference in Indonesian Muslims' perceptions of and attitudes toward the MUI's fatwa on health, for example, as occurred with the MUI's fatwa on smoking (Ihsan, 2017).

The strength of the present study lies in the large sample and its realism because it was carried out after the COVID-19 pandemic was declared a national disaster, reflecting the health crisis in Indonesia. In addition, this study reflects the latest national population statistics in Indonesia, where the male and young populations still dominate. However, it seems clear that our study sample is more representative of participants with a higher level of education and those who work as academics. In other words, because education and employment are proxies for determining economic status (Ware, 2019), this research can be generalized to the population of Indonesia with a relatively high socioeconomic status, especially men and young people. At the end of this section, we would like to underline that the knowledge, attitudes, and behavior of Muslims who comply with the MUI fatwa do not only depend on external factors such as socioeconomic factors. Another factor, such as the psychological need (Briscese et al., 2020), individuals' beliefs, and social factors (Rosha et al., 2021), especially experienced by men, to keep Friday prayers is pressure, so they decide to non-compliance.

Limitations of this Study

The weaknesses of this study are that limited internet access raises the potential for rural and older people, who have low technological literacy and negative attitudes and standard practices, to not be recorded as participants. This point is reinforced by reports that the PSBB cannot be fully implemented in rural areas such as the Bogor and Depok districts, West Java, due to social and cultural problems. Therefore, grassroots-level research on attitudes and practices about the MUI's fatwa regarding religious practices during the COVID-19 pandemic needs further attention. In addition, this study uses nonstandard instruments because they do not undergo internal consistency validation procedures.

The development of instruments in this study occurred only through focus group discussions and in-depth interviews with Islamic education lecturers who were also active as MUI members. Second, the questions in the questionnaire refer directly to the main points of the MUI's fatwa. Third, given the contribution of demographic variables and high attitudes toward practices, we may have overestimated the respondents' positive attitudes without knowing more about the relationship between their attitudes and knowledge regarding this fatwa. Fourth, the association of knowledge and practices regarding the MUI's fatwa review may need special attention, given that previous research shows a positive and significant relationship between these two variables (Goni et al., 2019; Kwol et al., 2020). Lastly, we recognize that the lack of literature related to this topic has limited the theoretical underpinning of this study; however, this study aims to contribute new knowledge to fill this gap in the literature.

Conclusion

This study has documented that Indonesians with a relatively high socioeconomic status, especially those who are male and young, have a positive attitude toward and high practices regarding the MUI's fatwa related to handling COVID-19. In addition, the attitudes associated with practices about the MUI's fatwa indicate that building a positive public perception of the MUI is essential to encourage religious practices under the government's policies and health protocols. The findings of this study enrich several previous studies that, with the existence of the MUI's fatwa, Indonesian Muslims can organize and carry out religious activities based on their religious orientation without ignoring the health and safety factors of the threat of COVID-19.

Acknowledgements The authors gratefully acknowledge the Universitas Negeri Malang, which provided the Priority Research Grant to fund the COVID-19 research [Grant Numbers: 3.3.16/UN32/KP/2020]. We would also like to thank the colleagues from Universitas Negeri Jakarta, Universitas Islam Malang, and Institut Teknologi Bandung for the collaboration and all the participants in this study.

Author Contributions Conceptualization was contributed by YH and AT; Methodology was contributed by MS and MAI; Formal analysis and investigation were contributed by MS and TND; Writing—original draft preparation was contributed by YH, MS and AT; Writing—review and editing was contributed by AT, YH, MS and MFH; Funding acquisition was contributed by YH; Resources were contributed by AH and YP; Supervision was contributed by YH.

Declarations

Conflict of Interest The authors declare no conflict of interest.

Consent for Publication Not applicable.

Consent to Participate The questionnaire was designed to be anonymous, and informed written consent was obtained from every respondent. Therefore, the data were confidential, and the result did not personally identify the respondents.

Ethical Approval Ethical approval was obtained from the joint research committee of Universitas Negeri Malang, Universitas Negeri Jakarta, Universitas Islam Malang, and Institut Teknologi Bandung.

References

- Al-Ansi, A. M., Ishomuddin, I., Sulistyarningsih, T., & Kartono, R. (2019). Rational choice of following Muhammadiyah and Nahdlatul Ulama and their social and political role in Indonesian society. *Open Access Library Journal*, 6(11), 1–15. <https://doi.org/10.4236/oalib.1105829>
- Alzghoul, B. I., & Abdullah, N. A. C. (2015). Psychosocial theories and pain management practices: A review of empirical research. *Mediterranean Journal of Social Sciences*, 6(6), 60. <https://doi.org/10.5901/mjss.2015.v6n6s2p60>
- Ariani, M., Achmad, Y., Kamarruzzaman, K., Agustina, I., Donna, B., & Wartatmo, H. (2019). Health sector preparedness during the Eid-al-Fitr homecoming across Indonesia in 2017. *Prehospital and Disaster Medicine*, 34(s1), 65–s65. <https://doi.org/10.1017/S1049023X19001444>

- Asmelash, D., Fasil, A., Tegegne, Y., Akalu, T. Y., Ferede, H. A., & Aynalem, G. L. (2020). Knowledge, attitudes and practices toward prevention and early detection of COVID-19 and associated factors among religious clerics and traditional healers in Gondar Town, Northwest Ethiopia: A community-based study. *Risk Management and Healthcare Policy*, 2020(13), 2239–2250. <https://doi.org/10.2147/RMHP.S277846>
- Barrueco, M., Hernández-Mezquita, M. A., Jiménez-Ruiz, C., Torrecilla, M., Vega, M. T., & Garrido, E. (2000). Attitudes of teachers about tobacco prevention at school. *Allergologia Et Immunopathologia*, 28(4), 219–224.
- Baždarić, K., Vrkić, I., Arh, E., Mavrinac, M., Gligora Marković, M., Bilić-Zulle, L., Stojanovski, J., & Malički, M. (2021). Attitudes and practices of open data, preprinting, and peer-review—A cross-sectional study on Croatian scientists. *PLoS ONE*, 16(6), e0244529. <https://doi.org/10.1371/journal.pone.0244529>
- Blauza, S., Heuckmann, B., Kremer, K., & Büsing, A. G. (2021). Psychological distance towards COVID-19: Geographical and hypothetical distance predict attitudes and mediate knowledge. *Current Psychology*. <https://doi.org/10.1007/s12144-021-02415-x>
- Briscese, G., Lacetera, N., Macis, M., & Tonin, M. (2020). Expectations, reference points, and compliance with COVID-19 social distancing measures. In *NBER Working Papers* (No. 26916; NBER Working Papers). National Bureau of Economic Research, Inc. <https://ideas.repec.org/p/nbr/nberwo/26916.html>
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk-taking: A meta-analysis. *Psychological Bulletin*, 125(3), 367–383. <https://doi.org/10.1037/0033-2909.125.3.367>
- Cascella, M., Rajnik, M., Cuomo, A., Dulebohn, S. C., & Di Napoli, R. (2020). Features, evaluation and treatment coronavirus (COVID-19). In *StatPearls*. StatPearls Publishing. <http://www.ncbi.nlm.nih.gov/books/NBK554776/>
- Chen, X., Gao, H., Zou, Y., & Lin, F. (2020). Changes in psychological well-being, attitude and information-seeking behavior among people at the epicenter of the COVID-19 pandemic: A panel survey of residents in Hubei province. *China. Epidemiology and Infection*, 148, e201. <https://doi.org/10.1017/S0950268820002009>
- Cobey, K. D., Laan, F., Stulp, G., Buunk, A. P., & Pollet, T. V. (2013). Sex Differences in risk taking behavior among Dutch cyclists. *Evolutionary Psychology*, 11(2), 350–364. <https://doi.org/10.1177/147470491301100206>
- Darmawan, D., Miharja, D., Waluyajati, R. S. R., & Isnaeniah, E. (2020). Sikap Keberagamaan Masyarakat Menghadapi Wabah COVID-19. *Religious: Jurnal Studi Agama-Agama Dan Lintas Budaya*, 4(2), 115–124. <https://doi.org/10.15575/rjsalb.v4i2.8596>
- Driessche, K. V., Sabue, M., Dufour, W., Behets, F., & Van Rie, A. (2009). Training health care workers to promote HIV services for patients with tuberculosis in the democratic republic of Congo. *Human Resources for Health*, 7(23), 1–9. <https://doi.org/10.1186/1478-4491-7-23>
- Duell, N., Steinberg, L., Icenogle, G., Chein, J., Chaudhary, N., Di Giunta, L., Dodge, K. A., Fanti, K. A., Lansford, J. E., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Tapanya, S., Uribe Tirado, L. M., Alampay, L. P., Al-Hassan, S. M., Takash, H. M. S., Bacchini, D., & Chang, L. (2018). Age patterns in risk taking across the world. *Journal of Youth and Adolescence*, 47(5), 1052–1072. <https://doi.org/10.1007/s10964-017-0752-y>
- Evans, G., & Durant, J. (1995). The relationship between knowledge and attitudes in the public understanding of science in Britain. *Public Understanding of Science*, 4(1), 57–74. <https://doi.org/10.1088/0963-6625/4/1/004>
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PLoS ONE*, 15(4), e0231924. <https://doi.org/10.1371/journal.pone.0231924>
- Garcia-Basteiro, A., Respeito, D., Augusto, O., López-Varela, E., Saco, C., Sequera, V.-G., Casellas, A., Bassat, Q., Manhiça, I., Macete, E., Cobelens, F., & Alonso, P. (2016). Poor tuberculosis treatment outcomes in Southern Mozambique (2011–2012). *BMC Infectious Diseases*, 16(214), 1–9. <https://doi.org/10.1186/s12879-016-1534-y>
- Gasper, K., Spencer, L. A., & Hu, D. (2019). Does neutral effect exist? How challenging three beliefs about neutral effect can advance affective research. *Frontiers in Psychology*, 10(2476), 1–11. <https://doi.org/10.3389/fpsyg.2019.02476>

- George, D., & Mallery, P. (2002). *SPSS for windows step by step: A simple guide and reference, 1.10 Update* (4th ed.). Allyn & Bacon.
- Goni, H., Naing, W.-A., Deris, A., & Baaba, A. (2019). Assessment of knowledge, attitude, and practice towards prevention of respiratory tract infections among Hajj and Umrah pilgrims from Malaysia in 2018. *International Journal of Environmental Research and Public Health*, *16*(4569), 1–11. <https://doi.org/10.3390/ijerph16224569>
- Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of COVID-19 pandemic in daily life. *Current Medicine Research and Practice*, *10*(2), 78–79. <https://doi.org/10.1016/j.cmrp.2020.03.011>
- Harapan, H., Rajamoorthy, Y., Anwar, S., Bustamam, A., Radiansyah, A., Angraini, P., Fasli, R., Salwiyadi, S., Bastian, R. A., Oktiviyari, A., Akmal, I., Iqbalamin, M., Adil, J., Henrizal, F., Darmayanti, D., Pratama, R., Setiawan, A. M., Mudatsir, M., Hadisoemarto, P. F., & Müller, R. (2018). Knowledge, attitude, and practice regarding dengue virus infection among inhabitants of Aceh, Indonesia: A cross-sectional study. *BMC Infectious Diseases*, *18*(96), 1–16. <https://doi.org/10.1186/s12879-018-3006-z>
- Hashmi, F. K., Iqbal, Q., Haque, N., & Saleem, F. (2020). Religious cliché and stigma: A brief response to overlooked barriers in COVID-19 management. *Journal of Religion and Health*, *59*(6), 2697–2700. <https://doi.org/10.1007/s10943-020-01063-y>
- Hidayaturrahman, M., Husamah, H., Sudarman, S., Yanti, F., & Kusumawati, I. R. (2021). Religious behavior of Indonesian Muslims as responses to the Covid-19 pandemic. *Al-Adabiya: Jurnal Kebudayaan Dan Keagamaan*, *16*(1), 1–14. <https://doi.org/10.37680/adabiya.v16i1.704>
- Ihsan, M. (2017). Merokok dalam Perspektif Muhammadiyah dan Nahdlatul Ulama. *AL-QADHA Jurnal Hukum Islam Dan Perundang-Undangan*, *4*(1), 16–33. <https://doi.org/10.32505/qadha.v4i1.174>
- Jain, P. (2021). The COVID-19 pandemic and positive psychology: The role of news and trust in news on mental health and well-being. *Journal of Health Communication*, *26*(5), 317–327. <https://doi.org/10.1080/10810730.2021.1946219>
- Jauhari, M. S., & Ghoni, A. (2020). The People's Obedience to MUI Fatwas (COVID-19, Bank Interest, and Interfaith Marriage). *AHKAM : Jurnal Ilmu Syariah*, *20*(2), 233–256. <https://doi.org/10.15408/ajis.v20i2.18685>
- Komisi Fatwa MUI. (2020). Fatwa No 14 Tahun 2020- Penyelenggaraan Ibadah dalam Situasi Terjadi Wabah COVID-19. *Majelis Ulama Indonesia*. <https://mui.or.id/berita/27674/fatwa-penyelenggaraan-ibadah-dalam-situasi-terjadi-wabah-covid-19/>
- Kusuma, R. H., & Waluyo, Y. S. (2010). Sikap dan Pandangan Masyarakat terhadap Fatwa-Fatwa Majelis Ulama Indonesia (MUI) (Studi Kasus pada Civitas Akademika Politeknik Negeri Jakarta). *Epigram*, *7*(1), Article 1. <http://jurnal.pnj.ac.id/index.php/epigram/article/view/450>
- Kwol, V. S., Eluwole, K. K., Avci, T., & Lasisi, T. T. (2020). Another look into the knowledge attitude practice (KAP) model for food control: An investigation of the mediating role of food handlers' attitudes. *Food Control*, *110*, 107025. <https://doi.org/10.1016/j.foodcont.2019.107025>
- Langsford, S., Douglas, G., & Houghton, S. (1998). Gender- and age-specific developmental patterns of risk-taking behavior among children and adolescents: An exploratory study. *Westminster Studies in Education*, *21*(1), 7–20. <https://doi.org/10.1080/0140672980210102>
- Launay, M., Le Faou, A.-L., Sevilla-Dedieu, C., Pitrou, I., Gilbert, F., & Kovess-Masféty, V. (2010). Prevalence of tobacco smoking in teachers following anti-smoking policies: Results from two French surveys (1999 and 2005). *European Journal of Public Health*, *20*(2), 151–156. <https://doi.org/10.1093/eurpub/ckp149>
- Lee, M., Lim, H., Xavier, M. S., & Lee, E.-Y. (2021). “A divine infection”: A systematic review on the roles of religious communities during the early stage of COVID-19. *Journal of Religion and Health*, *17*, 1–54. <https://doi.org/10.1007/s10943-021-01364-w>
- Pabbajah, M., Said, N., Faisal, T. M., Pabbajah, H., & Jubba, H. (2020). Reauthorization of the religious leader role in countering Covid- 19: Perceptions and responses of muslim societies on the Ulama's policies in Indonesia. *International Journal of Criminology and Sociology*, *9*(1), 262–273. <https://doi.org/10.6000/1929-4409.2020.09.25>
- Park, C. L., Russell, B. S., Fendrich, M., Finkelstein-Fox, L., Hutchison, M., & Becker, J. (2020). Americans' COVID-19 stress, coping, and adherence to CDC guidelines. *Journal of General Internal Medicine*, *35*(8), 2296–2303. <https://doi.org/10.1007/s11606-020-05898-9>
- Person, B., Sy, F., Holton, K., Govert, B., Liang, A., & National Center for Infectious Diseases/SARS Community Outreach Team. (2004). Fear and stigma: The epidemic within the SARS outbreak. *Emerging Infectious Diseases*, *10*(2), 358–363. <https://doi.org/10.3201/eid1002.030750>

- Peteet, J. R. (2020). COVID-19 anxiety. *Journal of Religion and Health*, 59(5), 2203–2204. <https://doi.org/10.1007/s10943-020-01041-4>
- Putinas-Neugebauer, A.-C., & Roland-Lévy, C. (2021). The psychological consequences of COVID-19 outbreak among the German population. *Psychological Studies*, 66(3), 308–325. <https://doi.org/10.1007/s12646-021-00614-x>
- Rolison, J. J., Hanoch, Y., Wood, S., & Liu, P.-J. (2014). Risk-taking differences across the adult life span: A question of age and domain. *The Journals of Gerontology: Series B*, 69(6), 870–880. <https://doi.org/10.1093/geronb/gbt081>
- Rosha, B. C., Suryaputri, I. Y., Irawan, I. R., Arfines, P. P., & Triwinarto, A. (2021). Factors affecting public non-compliance with large-scale social restrictions to control COVID-19 transmission in greater Jakarta, Indonesia. *Journal of Preventive Medicine and Public Health = Yebang Uihakhoe Chi*, 54(4), 221–229. <https://doi.org/10.3961/jpmph.21.101>
- Ruhana, A. S., & Burhani, A. (2020). *Survei Pengetahuan, Sikap dan Tindakan Umat Beragama Menghadapi Covid-19* (pp. 1–49). Puslitbang Bimas Agama dan Layanan Keagamaan, Badan Litbang dan Diklat Kementerian Agama Republik Indonesia. https://simlitbangdiklat.kemenag.go.id/simlitbang/spdata/upload/dokumen-penelitian/1592454380Laporan_UmatVSCovid_.pdf
- Saefi, M., Fauzi, A., Kristiana, E., Adi, W. C., Muchson, M., Setiawan, M. E., Islami, N. N., Ningrum, D. E. A. F., Ikhsan, M. A., & Ramadhani, M. (2020). Survey data of COVID-19-related knowledge, attitude, and practices among Indonesian undergraduate students. *Data in Brief*, 31, 105855. <https://doi.org/10.1016/j.dib.2020.105855>
- Telles, C. R. (2020). *Covid-19: A brief overview of virus social transmission through the atmosphere* [Preprint]. MediArXiv. <https://doi.org/10.33767/osf.io/2hek4>
- Turner, C., & McClure, R. (2003). Age and gender differences in risk-taking behaviour as an explanation for high incidence of motor vehicle crashes as a driver in young males. *Injury Control and Safety Promotion*, 10, 123–130. <https://doi.org/10.1076/icsp.10.3.123.14560>
- Ulhaq, Z. S., Kristanti, R. A., Hidayatullah, A. A., Rachma, L. N., Susanti, N., & Aulanni'am, A. (2020). Data on attitudes, religious perspectives, and practices towards COVID-19 among Indonesian residents: A quick online cross-sectional survey. *Data in Brief*, 32, 106277. <https://doi.org/10.1016/j.dib.2020.106277>
- Umucu, E., & Lee, B. (2020). Examining the impact of COVID-19 on stress and coping strategies in individuals with disabilities and chronic conditions. *Rehabilitation Psychology*, 65(3), 193–198. <https://doi.org/10.1037/rep0000328>
- Wan, T. T. H. (2014). A transdisciplinary approach to health policy, research, and evaluation. *International Journal of Public Policy*, 10(4–5), 161–177. <https://doi.org/10.1504/IJPP.2014.063094>
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17(5), E1729. <https://doi.org/10.3390/ijerph17051729>
- Wang, R., Yang, Y., Chen, R., Kan, H., Wu, J., Wang, K., Maddock, J., & Lu, Y. (2015). Knowledge, attitudes, and practices (KAP) of the relationship between air pollution and children's respiratory health in Shanghai, China. *International Journal of Environmental Research and Public Health*, 12(2), 1834–1848. <https://doi.org/10.3390/ijerph120201834>
- Ware, J. K. (2019). Property value as a proxy of socioeconomic status in education. *Education and Urban Society*, 51(1), 99–119. <https://doi.org/10.1177/0013124517714850>
- Warsono, E. (2007). *Sikap Masyarakat Muslim Terhadap Fatwa MUI Tentang Haramnya Doa Bersama Lintas Agama (Studi kasus pengajian MATAN dukuh Sawahan, Ngemplak, Boyolali)* [Bachelor Thesis, Universitas Muhammadiyah Surakarta]. http://eprints.ums.ac.id/17206/10/Bab_III.pdf
- World Health Organization. (2020). *Global Surveillance for human infection with the novel coronavirus (2019-nCoV): Interim guidance, January 31, 2020* (WHO/2019-nCoV/SurveillanceGuidance/2020.3). Article WHO/2019-nCoV/SurveillanceGuidance/2020.3. <https://apps.who.int/iris/handle/10665/330857>
- Yezli, S., & Khan, A. (2020). COVID-19 social distancing in the Kingdom of Saudi Arabia: Bold measures in the face of political, economic, social and religious challenges. *Travel Medicine and Infectious Disease*, 37, 101692. <https://doi.org/10.1016/j.tmaid.2020.101692>
- Yoosefi Lebni, J., Ziapour, A., Mehedi, N., & Irandoost, S. F. (2021). The role of clerics in confronting the COVID-19 crisis in Iran. *Journal of Religion and Health*, 60(4), 2387–2394. <https://doi.org/10.1007/s10943-021-01295-6>

- Zehra, S. S., Khalil, M. A., & Shoukat, L. (2020). When the big shots deviate: On the KAP of religious clerics regarding prevention of COVID-19 [Letter]. *Risk Management and Healthcare Policy*, *13*, 2801–2802. <https://doi.org/10.2147/RMHP.S290659>
- Zhong, B.-L., Luo, W., Li, H.-M., Zhang, Q.-Q., Liu, X.-G., Li, W.-T., & Li, Y. (2020). Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise of the COVID-19 outbreak: A quick online cross-sectional survey. *International Journal of Biological Sciences*, *16*(10), 1745–1752. <https://doi.org/10.7150/ijbs.45221>

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