



# NATIONAL SURVEY

## “Indonesian Students' Views on Religion, Pandemic and Disasters

### Researchers

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# INDONESIAN STUDENTS' VIEWS

ON RELIGION, PANDEMIC, AND DISASTER



## CONVEY REPORT

Indonesian Students' Views on Religion, Pandemic, and Disaster  
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## FOREWORD

All praises be to the God Almighty, by whose grace we were able to complete the report "**National Survey of Indonesian Students' Views on Religion, Pandemic, and Disasters**".

This survey was conducted in all provinces in Indonesia simultaneously on 1 - 30 September 2021 by taking a sample of students at selected schools. The subjects in this survey were students at the secondary education level under the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) and the Ministry of Religious Affairs (Kemenag). The first school group includes Senior High Schools, Vocational High Schools, National Plus Senior High Schools, Christian High Schools, Utama Widya Pasraman High Schools. At the same time, schools that are under the Ministry of Religious Affairs include Madrasah Aliyah (Islamic Senior High Schools), Catholic High Schools, Christian Theology High Schools. Data collection was carried out by enumerators who have been trained in each province to conduct surveys on selected schools. In each province, the enumerators are coordinated by a provincial coordinator.

We thank the various parties and individuals who helped us complete this survey and report. Without their help, these surveys and reports would not have been possible. Our thanks to all students and schools that participated in this survey. We also thank the field coordinators and enumerators who spent great lengths of time collecting the data for this survey. Thanks also go to the Ministry of Education, Culture, Research, and Technology and the Ministry of Religious Affairs, and UNDP that provided enormous assistance in carrying out this survey.

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Jakarta, January 2, 2022  
PPIM National Survey Team

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# INTRODUCTION

## A. Background

The pandemic caused by the Corona virus (COVID-19) spread has significantly affected various aspects of human lives. The demand to maintain distance and limit mobility as a health response to avoid the Corona virus has changed many things from the social and economic life of the community. During the pandemic, physical and social interactions declined and were largely replaced by interactions via virtual networks. This happens not only in the world of work and the economy but also in education. Teachers and students must carry out the learning process online, not in the classroom as usual. In the economic field, the spread of the Corona virus and restrictions on mobility have harmed many sectors. So that many companies have been forced to reduce operating capacity or even stop operating altogether. As a result, millions of workers lost their jobs. Poverty rates are increasing, and many residents have difficulty meeting their daily needs. The COVID-19 has also caused a great number of deaths. This is certainly very influential on the socio-economic conditions of the affected families, especially those who are left behind.

However, upon closer inspection, the impact of the COVID-19 pandemic is not similar between individuals or social groups. Economically, a number of studies show that the COVID-19 pandemic has a worse impact on the poor and vulnerable. Those from these groups suffer the most from the loss of their jobs or sources of income during the COVID-19 pandemic. In the field of education, not all schools or regions in Indonesia can do online learning method. In addition to the limitations of the internet network and online learning facilities, many teachers have insufficient skills to teach online. As a result, some think that the COVID-19 pandemic will widen the academic gap between students, considering that the negative impact of the COVID-19 pandemic on learning loss would not be the same among students. Therefore, it is urgent to pay attention to the differences in the impact of the COVID-19 pandemic between individuals or groups, since a good understanding on certain individuals or groups who tend to be badly affected by the COVID-19 pandemic is very necessary.

Based on the above considerations, this study will specifically highlight the impact of COVID-19 on school students. The results of a survey conducted by the World Value Survey (WVS) show that the COVID-19 pandemic has greatly affected the development of young people (aged 18-35 years). This group is the most severely affected group compared to other age groups. In some ways, age seems to affect a person's response to the COVID-19 pandemic.

In Indonesia, the Central Bureau of Statistics shows the survey results show that respondents aged 17-30 years perceive feel that they are less likely to transmit COVID-19 than respondents in older age groups. The proportion of respondents in the 17-30 year age group who stated that they might be or were very likely to be infected with COVID-19 (43.4%) was lower than the proportion of respondents who said the same thing in the 31-45 year age group (49.4%), 46-60 years (52.7%) and the age group above 60 years (50.3%) (the Central Bureau of Statistics [BPS], 2020: 38).

In addition, the Central Bureau of Statistics survey also shows that the level of obedience to health protocols is in line with age. The higher the age of the respondents, the higher their level of adherence to health protocols. In adolescents (under 20 years), the average score for health care adherence was 7.3. This figure is lower than the average health care adherence in the 31-35 year age group (7.9), and much lower than the 56-60 year age group (8.1) (BPS, 2020: 22). In addition to the behaviour of wearing masks, the younger age group (17-30) has a lower level of obedience in carrying out health protocols. For example, only 66% of respondents aged 17-30 years stated that they usually wash their hands with soap for at least 20 seconds. This figure is lower than the proportion who do the same in the age group 31-45 years (75.3%) or 46-60 years (83.4%). Likewise, only 64% of respondents in the 17-30 year age group stated that they kept their physical distancing. In the age group 31-45 and 46-60 years, those who stated to keep their physical distancing were 73.2% and 81.9%, respectively. These differences indicate the need to pay special attention to young people such as school-age children in responding to the social impacts caused by the COVID-19 pandemic.

## B. Religion, Pandemic, and Health: Research Focus

Religion has a vital role in everyday life and in all aspects of Indonesia, including in Indonesia's education policy (PPIM, 2021). Research by Pew Research (2019) shows that more than half of Indonesia's population (83%) believe that religion has a greater influence on the nation today than 20 years ago. This condition affects the community's response to the COVID-19 pandemic or its impact on the socio-religious life of the community. Research shows the potential impact of the COVID-19 pandemic on the recruitment and radicalization of violent extremists (Avis, 2020) and the pandemic as an incubator for online extremism (Naseer, 2020). The COVID-19 pandemic exacerbates the threat of violent extremism by providing violent extremists with new opportunities, motivation and capabilities. Disasters, including pandemics, are crises. According to social identity theory, extremist ideology is essentially rooted in the construction of crises and how crises threaten one's identity.

Religion also affects the community's response to the spread of the Coronavirus (Model & Kardia, 2020). Many studies were conducted in many countries, including Indonesia during a pandemic. Ruhana and Burhani (2020) conducted research on 18,000 respondents from 34

provinces in Indonesia. The results showed that 20.89% of respondents reported always and 12% of respondents often worshipped in places of worship, even though almost half of the survey respondents lived in the red zone. High respect for religious leaders (Kiai, ulema, or priests) contributes to the difficulty of applying physical distancing or avoiding physical contact. The Gowa Tablighi Jamaat Ijtima Conference which 25,000 people attended showed that several participants were detected as having contracted COVID-19 (Wirawan, 2020). On the other hand, 333 Kiai of Nahdlatul Ulama passed away during the pandemic, and it is assumed that the increase occurred after Eid al-Fitr and Adha. In the Christian community ahead of Christmas 2020, there were 47 GBI (Indonesian Bethel Church) of the Barigas Congregation in Palangkaraya infected with COVID-19, and 60 people were infected.

However, research on the pandemic in Indonesia still needs to be improved. Although Indonesia is classified as a disaster-prone area and the community upholds religious values, a systematic study of the relationship between religion and response to disasters has not been carried out systematically. Existing studies only cover certain areas. These studies include Gusmian's (2020) study on disaster mitigation in Java, Imas Emalia's study on the pandemic in Cirebon, Atep Kurnia's study on the Plague Pandemic in Sunda, and Yusri Ahimuddin's study on earthquakes in Minangkabau. Empirical data on religion, pandemics, and disasters in Indonesia has not been found. Research has been done in Indonesia such as the readiness of Muslims for vaccination (Research and Development, Ministry of Religious Affairs, 2021). The most recent study on religion and pandemics was conducted by PPIM (2021). The results show that students at three state Islamic universities (UIN Jakarta, UIN Bandung, and UIN Yogyakarta) need to increase social cohesion and trust in the government and its institutions in dealing with the pandemic situation (PPIM, 2021).

Based on the considerations above, this report specifically seeks to answer the following questions:

1. What are the dynamics of life and religious views of school and madrasa students during the COVID-19 pandemic? What affects the living conditions and religious views of these students?
2. How do religious views affect the attitudes and responses of school and madrasa students in dealing with the COVID-19 pandemic? More specifically, how do students' religious views affect their awareness to health protocols and vaccination programs?

In addition, based on a gender perspective, the COVID-19 pandemic raises questions about how the pandemic's impact and response differ between men and women. In the context of disasters, some groups indicate that women are more influenced by religion than men in the context of disasters. Thus, they can play a key role in amplifying the positive effects of religiosity in times of pandemic (Sohrabzadeh, Jahangiri, & Jazani, 2020). The most recent terror

cases in Indonesia (Makassar, Bekasi and Jakarta) in March 2021 showed that the bombers police arrested were women (Terror in Indonesia, 2021). Another study from Massey (2020) reports on gender differences in COVID-19 attitudes and behavior. Research shows that women are more likely to take COVID-19 as a very serious health issue, agree to withhold public policy measures, and comply. This study will look at how such differences are also found among school/Islamic school students.

### C. Objectives and Significance of the Study

This survey aims to obtain an overview of students' views on pandemics, religion and disasters. In addition, this survey will also capture the factors that influence students' religious views in Indonesia. More specifically, this survey is intended to:

1. Gain an overview of students' views on religion and the pandemic.
2. Obtaining initial information to plan actions to increase social cohesion during a pandemic
3. Provide information about the role of schools in helping prepare students for the pandemic.

Generating knowledge-based data by conducting research on religion, pandemics, and disasters will provide a good understanding of the important factors for increasing social cohesion in Indonesia. In terms of social cohesion, research on religion during a pandemic can increase knowledge about the important push and pull factors for promoting violent extremism and religious moderation in Indonesia, especially for young people. Data on the role of religion in pandemics and disasters in Indonesia will be needed in developing appropriate policies related to disasters and religious education. The lessons learned from this can provide important input for the implementation of religious education and increase the role of religious institutions in building resilience during and after disasters as well as supporting religious moderation strategies in Indonesia. In addition, understanding the condition period is very necessary for students during the COVID-19, as the current students are the future of Indonesia. In addition, demographically, high school students are the most significant proportion (27.94%) of the Indonesian population (BPS, 2021).

## THEORETICAL FRAMEWORK

In accordance with the focus of attention of the 2021 PPIM National Survey, several main issues are the subject of discussion in this report. First, this report will investigate how the COVID-19 pandemic has affected students' religious life development during the pandemic. Second, this report will also look at the extent to which religious views affect students' responses to the COVID-19 pandemic. As we will discuss further, we define this response broadly to include student behavior or thoughts related to the spread of the Corona virus. Specifically, we will highlight three things:: obedience to health protocols, willingness to be vaccinated, and belief in hoaxes or conspiracy views. In addition, this report will also highlight several issues related to students' socio-political and religious views. This last section is intended to get a little overview of the condition of social cohesion among students during the COVID-19 pandemic.

### A. Life and Religious Views in the Period of Pandemic

This study was intended to scrutinize students' religious life conditions and dynamics during the COVID-19 pandemic. According to Peter Connoly (1999), religion can be defined as "a belief system that involves acceptance of a trans-empirical sacred reality, and behavior intended to enhance one's relationship with that reality" (Connoly 1999: 6-7). Following this definition, religion has two important components: belief or faith and religious behavior. Therefore, to capture the dynamics of students' religious life during the pandemic, we used three questions that ask the extent to which the respondents' beliefs and worship behavior have changed during the COVID-19 pandemic. One question asks about changes in religious beliefs, while the other two questions ask about changes in personal and group worship habits.

According to the point of view of the functionalist theory of religion, religion has an essential role for individuals and society when dealing with various problems arising due to the COVID-19 outbreak. Religion provides meaning and a source of value that connects human actions with the surrounding environment and life after death. This provides motivation and a strong foundation for humans to act and respond to the problems faced in everyday life. Researchers have found that religiosity is useful in helping someone to deal with traumatic conditions or diseases such as cancer. Religiosity has a negative relationship with depressive symptoms (Smith, Poll and McCullough 2003). In severe illness or difficulty, religion provides

a mechanism to face reality and make psychological adjustments (Cruz et al., 2016; Ersahin, 2020; Krok, Brudek, and Steuden, 2019). Religion provides a way for individuals to face difficulties and reduce the negative effects of stressful conditions (Dolcos, Hohl, Hu, and Dolcos, 2021). Religion gives individuals self-strength and social support to face their problems (Fatima, Sharif, and Khalid 2018).

During the COVID-19 pandemic, a number of studies have shown the important role of religion and spirituality in dealing with the pandemic. According to Thomas and Barbato (2020), religion can effectively help individuals reduce the risk of depression during the COVID-19 pandemic. Counted et al. (2020) found that feelings of closeness or a positive relationship with God were positively associated with a calmer mental state in dealing with stress or uncertainty due to the COVID-19 outbreak. On the other hand, negative or distant feelings from the Sacred are negatively associated with calmness or quality of life during a pandemic. ositively maintainedChang et al. (2021) found that religion positively maintained mental health and happiness levels during the COVID-19 pandemic among health workers.

In taking into account the role or benefits of religion in maintaining peace of mind, people may use religion as one of the main self-defence mechanisms to deal with the uncertainty and stress caused by the COVID-19 outbreak. Several previous studies have shown that disasters and pandemics affect people's religious life development. According to Norris and Inglehart (2011), religion can be understood as a human response to feelings of insecurity in life. They found that feelings of insecurity were positively correlated with religiosity. This feeling of insecurity can arise as a result of various factors. In addition to socio-economic factors such as poverty or inequality, uncertainty or vulnerability caused by natural conditions such as disasters can also cause insecure feelings among humans. As Bentzen (2019) points out, natural disasters increase a person's level of religiosity. Those who live in disaster-prone areas have a higher level of religiosity than those living in areas safe from disasters or far from disaster-prone areas.

However, regarding COVID-19, research on the impact of the pandemic on religious life has shown mixed results. Some researchers have found that community religious activities have increased since the COVID-19 outbreak. Based on search data on the Google search engine, Bentzen (2020) shows that prayer searches on the internet have increased after the outbreak of the Corona virus at the end of 2019. It indicates that people's religious behavior tends to increase during the pandemic. Bentzen further stated that this increase in prayer activity was found in people with various religious levels (low, medium, or high), except in countries that were among the 10 percent of least religious countries. In line with these findings, Molteni et al. (2021) found that in Italy, people exposed to COVID-19 or whose family members were infected by COVID-19 experienced an increasing trend of worshipping activities both in terms of praying during the pandemic and attendance at worship services (via the web, radio

or television). In the United States, the results of the PEW survey (2020) found that religious activity increased especially among those from lower economic backgrounds and those who considered religion to be important or very important.

However, it is also important to note that the impact of COVID-19 on religious life can vary between individuals. In Spain, for example, the results of Diaz et al. (2020) research show differences in the tendency of individual religious responses to the COVID-19 outbreak. Although the proportion of respondents who stated that they were increasingly religious during the COVID-19 pandemic; those who stated that their level of religiosity had decreased during the pandemic also increased in number. These different trends can be explained by the fact that when the COVID-19 pandemic began, individual religious levels were not the same. Many individuals have a low or superficial level of trust because their religious behavior may be more based on social conditions or people's habits. When a pandemic occurs, it is possible that those who have a superficial level of religious belief actually experience a decline in religious belief. Instead of increasing religious beliefs, the COVID-19 pandemic can reduce a person's level of religious belief.

## B. Religion and Health Behavior during the COVID-19 Pandemic

Indonesian society belongs to a very religious society. As mentioned earlier, various public opinion surveys indicate that religion is important or very important for the majority of respondents. Religion significantly influences various aspects of Indonesian society, from culture and social relations among citizens to education and politics. In many cases, religion is often a factor differentiating a person's political choices or views. In various sensitive public issues such as the rights of minority groups, pornography, sex education, and prevention of sexual violence, religious views are an essential factor that classifies the various parties.

The influence of religion is also found in health issues. Research by Nurmansyah et al. (2020) shows that religion positively impacts health. Among the adolescent children who were the subject of their research, Nurmansyah et al. (2020) found that intrinsic religiosity is positively associated with hygienic behavior. The lower the level of a person's intrinsic religiosity, the lower the level of that person's hygienic behavior. In addition, they also found that those with higher levels of religiosity were less likely to engage in health-risk activities. However, on the contrary, some research results show the negative impact of religion on health behavior. In an article reviewing previous research on health behavior in Indonesia, Widayanti et al. (2020) find that many people have a somewhat fatalistic view on health, believing that health is a gift from God and disease is fate or destiny, or often regarded as a punishment from God. In the implementation of vaccination, several studies have shown that certain religious views contribute to the anti-vaccine phenomenon in some circles.



The results of these studies indicate that religion influences shaping a person's response or health behavior in the face of the COVID-19 pandemic. As suggested by the WHO and health experts and related policymakers, the public needs to obey health protocols to flatten the pandemic curve or prevent the Coronavirus from continuing to spread. These health protocols include some actions like washing hands with soap and running water, wearing masks, social distancing, and avoiding crowds. In addition, the government and health experts strongly recommend vaccination in preventing the spread of the Coronavirus. However, acceptance of vaccinations and adherence to health protocols during a pandemic are not the same among students. Whereas for students, obedience to health protocols and willingness to undergo vaccination have a to prevent the spread of the Coronavirus and strategic role in preventing the spread of the Coronavirus and reopening schools and teaching and learning activities. Without denying other factors such as economic conditions or supply of vaccines that can also affect, this study highlights explicitly explicitly highlights the influence of religion in shaping students' adherence to health protocols or willingness to be vaccinated.

Our hypothesis is that religious views affect a person's health response to the COVID-19 pandemic through the influence of certain religious views based on belief in conspiracy theories about the spread of the Coronavirus. Thus, this main hypothesis contains two hypotheses. First, certain religious views, in this case, we see the influence of Islamic religious views, making adherents of these religious views more easily influenced by conspiracy views or hoaxes related to COVID-19. Second, belief in conspiracy theories or hoaxes will in turn affect a person's level of adherence to health protocols or their willingness to undergo vaccination. The more they believe in conspiracy views or hoaxes, the lower their level of adherence to health protocols or their willingness to undergo vaccination.

Conspiracy views or theories can be understood as the belief that an event is caused by a covert plan by certain groups for their benefit (Douglas 2020). The extent to which people are easily influenced to believe in conspiracy views can be influenced by various factors. According to Phadke, Samory, and Mitra's (2020) research results, social factors contribute to a person's acceptance of conspiracy theories and hoaxes. By analyzing the online interaction processes that shape one's involvement in the online conspiracy community on Reddit, they found that the dyadic interactions with members of the conspiracy group and the marginalization that the individual receives in a non-conspiracy theorist environment contribute to belief in conspiracy theories or even it can lead a person to join a conspiracy group. Thus, a person's transition into an individual who believes in conspiracy theories occurs through complex social processes. Before getting misinformation, the individual may experience segregation or social stigma, making him an easy target to be influenced by conspiracy ideas or hoaxes.

However, other studies have shown that ideas or ideologies also influence a person's acceptance of conspiracy theories. Some researchers suggest that religion contributes to belief in conspiracy theories. Kranz et al. (2020) find that religion is correlated with responses or behaviors that are not based on clear reasoning in responding to the COVID-19 pandemic, including belief in conspiracy theories. This connection is understandable because both religion and conspiracy theories involve certain ways of thinking, and both are connected – though not in a simple way with social power (Robertson, Aspren, and Dyrendal 2019: 1). However, other researchers have stated the need for caution in viewing the relationship between religion and belief in conspiracy theories (Ladini, 2021; Jasinskaja-Lahti and Jetten, 2019). That religion is related to belief in conspiracy does not mean that the more religious a person is, the greater the level of belief in conspiracy theories, and people who claim to be non-religious will not believe in conspiracy theories at all. In fact, some non-religious people also believe in conspiracy views.

The link between religion and belief in conspiracy theories is not rooted in behavior or adherence to religious teachings in general but rather in a certain perspective on religion. In Australia, for example, Jasinskaja-Lahti and Jetten (2019) find that the most influential aspect of religion is the extent to which a person views religion as a vital tool in solving the problems they face. Belief in conspiracy theories is mainly found in those who state the importance of religion in solving their problems. In Italy, Ladini (2021) finds that belief in conspiracy theories is associated with alternative religious views. This alternative religion refers to religious sects that are outside the mainstream religious views. This association is more or less related to the fact that alternative religions are on the periphery compared to mainstream religions. Conspiracy views are more likely to be believed by those who are socially marginalized or marginalized.

According to Phadke, Samory, and Mitra (2020), the relationship between religion and conspiracy theories is not 'fixed', but can change depending on the context and subject matter. Ladini further points out that some aspects of religion are unrelated or otherwise reject conspiracy theories. In Italy, attendance at mass services is negatively associated with belief in conspiracy theories. This is more or less because the mass is the acceptance or belief in the church's authority, which has a good position in society. This is clearly different from the social position of alternative religious sects, which tend to be marginalized. In the context of Indonesia, where the majority of the people are considered to have quite moderate religious views, the alternative position is played by the view of Islamism. Therefore, it is reasonable to hypothesize that support for Islamism is positively correlated with accepting conspiracy theories. Islamism is closely related to a powerful primordial religious identity. This makes those who support Islamism have a marked tendency to distance themselves or have suspi-

ons about outside groups. In times of crisis, such attitudes become fertile ground for developing conspiracy theories about the causes of the crisis.

Besides Islamism, collective deprivation also can increase a person's likelihood of believing in conspiracy theories. In simple terms, relative deprivation refers to the disappointment that arises as a result of a person's perception of the gap between what may or should be obtained individually or collectively and what is perceived as the actual reality. Many studies in the field of sociology or psychology show that relative deprivation has a major influence on various attitudes or social behavior, especially concerning relationships between groups. People who have feelings of relative deprivation will tend to have a substantial group identification and at the same time have a dislike or disappointment with other groups who are perceived to be more advantageous than their group. Therefore, those with deep feelings of relative deprivation also tend to distrust others or outside their group. Like Islamism, such an attitude can become fertile ground for conspiracy theories to develop, especially when extraordinary events arise, such as the COVID-19 pandemic, which is considered detrimental to themselves or their group. We suspect that apart from Islamism, feelings of relative deprivation have also contributed to the widespread acceptance of conspiracy theories about COVID-19 among school/Islamic students.

### C. Schools/Islamic Schools, Religion and Response to COVID-19

Students' psychological, social and religious development Schools play a very important role in students' psychological, social, and religious development. Without neglecting the role of other environments such as family and the surrounding environment, in some cases, the school is a very important environment for students. In addition to being a place where students develop their potential for knowledge or cognition, schools provide facilities, activities, or a social environment to develop their potential, including in matters related to religion. First, several studies show that spiritual activities affect the development of students' religious life (PPIM 2018, 2021). Those active in religious activities at school have different religious understandings or attitudes from students who are not. The first group is considered to tend to be more Islamist than the second group. This difference is thought to be partly from activities or studies developed by religious activities.

Second, related to the relationship between groups, it can be said that school is the most obvious form of social grouping faced by students. This grouping is in many ways determined by the school's admission system. For example, an admissions system based on grades can produce a different composition of students than an admissions system that emphasizes the distance between the student's home and school. At the individual student level, the composition of friends owned by a person can influence these students' attitudes and social views. Friendship with students who have different religions can open up students' insight

into the condition of people of other religions to reduce suspicion of these religious groups. Conversely, a homogeneous friendship environment has the potential to strengthen one's social bonds or identity. These facts indicate that the circle of friends can also affect the level of a person's feelings of relative deprivation. The influence of friendships on the development of socio-religious life can be categorized as part of the school's influence because the friends that students may have in some ways are influenced by government policies, especially related to student admission rules.

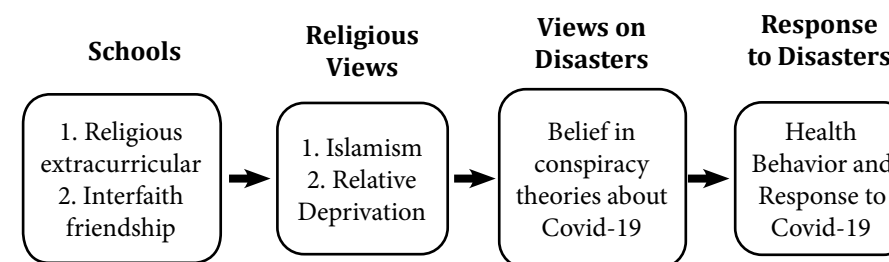


Figure 2.1.  
Theoretical framework

In a broader way of thinking, the points mentioned above show that the school factor can have a significant role in the relationship between religion and response to dangers such as the COVID-19 pandemic. This is mainly because schools have the potential to strengthen the tendency of Islamism and the relative deprivation of students. Islamism and this relative deprivation can affect students' acceptance of conspiracy theories, which will affect how one reacts to the dangers of the Coronavirus. In simple terms, these relationships can be shown in Figure 2.1 above. This analysis further examines the relationship between these factors among public school/Islamic school students.

## RESEARCH METHOD

### A. Survey Scope

This survey was conducted nationally in 34 provinces. Data were collected by taking a number of regencies/cities as samples which were determined proportionally to the number of students in each regency/city in each province. Data collection was carried out on 1 - 30 September 2021 simultaneously in all research sites. The target population includes all active students in secondary schools under the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) and the Ministry of Religious Affairs (Kemenag) which include:

1. Under the supervision of the Ministry of Education, Culture, Research and Technology:
  - a. High School (SMA)
  - b. Vocational High School (SMK)
  - c. National Plus High Schools (SPK SMA)
  - d. Christian High School (SMAK)
  - e. Hindu-Based High School (Utama Widya Pasraman)
2. Under the supervision of the Ministry of Religious Affairs:
  - a. Madrasah Aliyah/Islamic High School (MA);
  - b. Catholic High School (SMAg.K)
  - c. Christian Theology High School (SMTK)

Based on data available on the official websites of the Ministry of Education, Culture, Research and Technology and the Ministry of Religious Affairs, Table 3.1. shows the number of senior high schools under the supervision of the Ministry of Education, Culture, Research and Technology (28,511 schools) and the Ministry of Religious Affairs (9,350 schools).

Table 3.1.  
Number of Schools by Ministry at Senior High School Level in 2021

Ministry	School Type	Number
The Ministry of Education, Culture, Research, and Technology	SMA	14.019
	SMK	14.336
	SPK SMA	107
	SMAK	44
	Utama WP	5
	Subtotal	28.511
The Ministry of Religious Affairs	MA	9.131
	SMAg.K	40
	SMTK	174
	Subtotal	9.345
<b>Total</b>		<b>37.856</b>

Source: <https://referensi.data.kemdikbud.go.id> and <http://emispendis.kemenag.go.id>

## B. Stratification

This survey is designed to be nationally representative. For this reason, prior to sampling, students were grouped based on their school type into 3 strata, namely:

1. High School; which includes Public High School, National Plus High School, Cristian High School, and Utama Widya Pasraman (Hindu-Based High School)
2. Vocational High School;
3. "Religion-Based High School, which includes Madrasah Aliyah/Islamic High School (MA), Catholic High School (SMAg.K), and Christian Theology High School (SMTK)

Based on the stratification, Table 3.2. presents the number of schools and students that form the sample frame in this study. At the final stage of sampling, stratification is also carried out implicitly (implicit stratification) based on the Religion and Gender of the students.

Table 3.2.  
The number of Schools and Students based on High School Level 2021

School Type	School Number			Student Number		
	Public	Private	Total	Male	Female	Total
High School	6.907	7.268	14.175	2.216.953	2.731.066	4.948.019
Vocational School	3.652	10.684	14.336	2.949.778	2.163.622	5.113.400
Religion-Based School	812	8.533	9.345	641.161	824.284	1.465.445
<b>Total</b>	<b>11.371</b>	<b>26.485</b>	<b>37.856</b>	<b>5.807.892</b>	<b>5.718.972</b>	<b>11.526.864</b>

Source: <https://referensi.data.kemdikbud.go.id> and <http://emispendis.kemenag.go.id>

## C. Sample and Margin of Error

This survey was conducted to get an overview of the views of students in Indonesia on pandemics, religion, and disasters. In addition, this survey will also capture the factors that influence students' religious views in Indonesia. For this reason, the determination of the sample size must also take into account a good level of accuracy. According to the stratification above, the number of samples taken in this study was 3510 student respondents who were allocated proportionally to each type of school. Table 3.3 below presents the sample allocation for each type of school along with the Margin of Error (MoE) calculated at the 95% confidence level and assumes the proportion of Islamist students is 0.5. The sample was allocated proportionally to 234 schools in 77 regencies/cities spread across 34 provinces in Indonesia. Determination of the number of student samples for each type of school, regency/city, and province chosen by probability proportional to size sampling with the size of the number of students in each province.

Table 3.3.  
Student Sample Proportions and Margin of Error

School Type	School Number	Student Number	Student Sample Target Allocation	MoE*)
High School	14.175	4.948.019	1.500	2,53
Vocational School	14.336	5.113.400	1.605	2,45
Religion-Based School	9.345	1.465.445	405	4,87
Total	37.856	11.526.864	3.510	1,65

Note: MoE = Margin of Error (%), and it accounted for the 95% confidence level, and it is assumed that the proportion of Islamist students is 0.5.

#### D. Observation and Sampling Unit

The observation unit is the unit whose characteristics will be recorded in a study or data analysis, while the sampling unit is the unit used as the basis for sampling either in the form of elements or groups. In this data collection activity, the active students in the High School, Vocational High School, and Religion-Based School groups in grade 12 from all majors were selected as samples. Meanwhile, the sampling unit in the form of elements is students in which the sampling unit is a collection of elements (clusters), namely districts/cities and schools. The sample selection was carried out in stages (multistage sampling) with the following sampling units:

1. Primary Sampling Unit : Regency/city
2. Secondary Sampling Unit : School
3. Ultimate Sampling Unit : Student

#### E. Sampling Frame and Sampling Method

The sampling frame refers to the list of units in the target population sampled. This study uses several sampling frames used at each stage of sampling as follows:

1. The sampling frame for the first stage is a list of regencies/cities located in 34 provinces in Indonesia.
2. The second phase of the sampling frame is a list of schools at the senior high school level in selected districts and cities in each province, both those under the supervision of the Ministry of Education, Culture, Research, and Technology (Kemdikbudristek) and the guidance of the Ministry of Religious Affairs (Kemenag). The list of schools is divided into three kinds of schools, namely Senior High Schools, Vocational High Schools, and Religion-Based Schools, as previously explained.

The list of schools used in this survey was obtained from the official websites of the Ministry of Education, Culture, Research and Technology (<https://reference.data.kemdikbud.go.id>) and the Ministry of Religious Affairs (<http://emispendis.kemenag.go.id>), which were downloaded from 1 – 18 July. 2020.

3. The sampling frame for the third stage is a list of active 12th-grade students in all majors at the selected school. There were more than one class of 12 selected schools, and random sampling was done to select one class.

Sampling in this survey was carried out by Multistage Sampling (Three-Stage Sampling) with the following stages:

Stage I: In the first stage, a sample of regencies/cities is selected in each province. Determination of regency/city allocation is carried out on a probability proportional to size (pps) basis with the size of the number of students in each province. The number of sampled regencies/cities used was 77 regencies/cities. The selection of regencies/cities in each province was carried out using Circular Systematic Sampling according to the sample allocation that had been formulated earlier. During this period, a sample allocation of students and schools was determined for each province in a probability proportional to size (pps) basis with the size of the number of students. a list of regencies/cities selected as samples along with their allocations in 34 provinces can be seen in Appendix XX.

Phase II: In the second phase, a sample of schools was selected for each group of Senior High Schools, Vocational High Schools, and Religion-Based Schools in each selected regencies/city based on the sample framework for the list of schools that had been obtained previously. School selection is carried out by Circular Systematic Sampling according to the sample allocation that has been formulated. The sample allocation of schools and students in each regency/city in each province is contained in Appendix 1. Each provincial coordinator would give a list of selected schools in each province.

Stage III: In the third stage, a sample of students was selected at the selected school. The number of student samples taken from each selected school was 15 students. Circular Systematic Sampling carried out the selection of student samples with implicit stratification according to the religion and gender of the students. Phases I and II above were carried out at the center, while officers carried out Phase III in each survey area.

The stages of sampling can be described as follows:

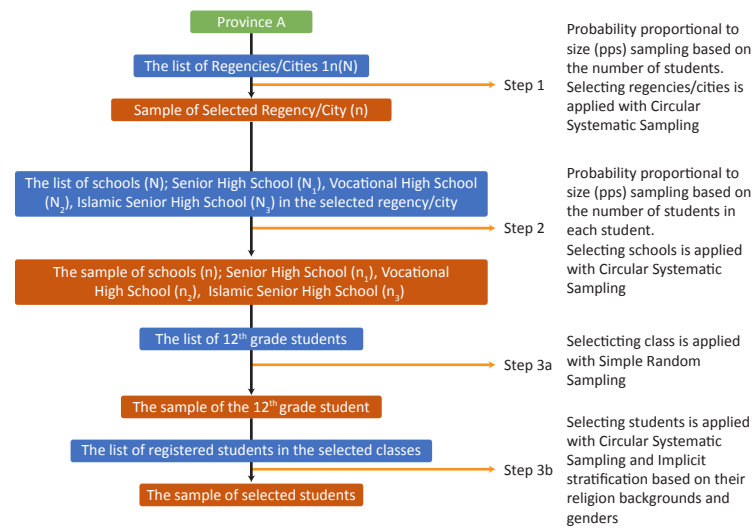


Figure 3.1.  
Sampling Section

## F. Realization of Student Sample

As previously explained, this survey was carried out simultaneously in all provinces within a period of 1 month, namely September 1 – 30, 2021. From the planned sample target of 3510 student samples, the real sample obtained was 3031 students. This figure shows that the response rate for this survey is 86.35%. With a response rate of 86.35%, the student response in this survey is very good. In addition, the Margin of Error (MoE) from the realization of a sample of 3031 students obtained was 1.78%. With this figure, this survey has a very good response rate.

Several problems become obstacles in carrying out this survey. Some of these issues include:

1. Some target schools/Islamic schools have closed or changed their function.
2. Some sample schools have very few grade 12 students and less than 15 targeted students from one school
3. Error in having the type of schools because the names of the schools are the same, which should be the data of public schools, but the data were taken from vocational high schools.
4. The school refused to be surveyed for several reasons, such as:
  - a. The school is busy preparing for the accreditation process.
  - b. The school assumes that this research represents the interests of foreigners who do not like Islam.
  - c. The school assumes that this research contains political elements.

Several attempts were made to interview the targeted sample. However, around 5.13% of schools did not want/refuse to be surveyed in the end, so they were considered non-response observations. Figure 3.2. shows the distribution of the actual number of student samples per province.



Figure 3.2.  
Map of the Distribution of Realized Number of Student Samples by Province

As described in the section on sampling methods, samples are allocated proportionally in each sampling stage. The use of this proportional allocation method is expected to produce a simple estimator of the sample average. In addition, proportional allocation is also reasonable when the variance and cost of data collection in each stratification are different (Scheaffer et al., 2012). A comparison of student populations per province and sample realization and their proportions in each province can be seen in Appendix 1. Table 3.4 and Table 3.5 show the population size and realization of the sample and the proportion of each sample category based on the education level and the school-supervising institutions.

Table 3.4.  
The Proportions of Population Size and Sample Realization based on Types of Schools

Types of School	Student Population	% of Total Student Population	Realization of Student Sample	% of Total Sample Realization
High School	4.948.019	42,93 %	1277	42,10 %
Vocational School	5.113.400	44,36 %	1407	46,39 %
Religion-Based School	1.465.445	12,71 %	349	11,51 %
Total	11.526.864	100,00 %	3033	100,00 %

Table 3.5.



Number of Populations and Realization of Samples and Proportions according to the Supervising Institutions

Supervising Institutions	Student Population	% of Total Student Population	Realization of Student Sample	% of Total Sample Realization
The Ministry of Education, Culture, Research, and Technology	10.061.419	87,29 %	2684	88,49 %
The Ministry of Religious Affairs	1.465.445	12,71 %	349	11,51 %
Total	11.526.864	100,00%	3033	100,00 %

With the sampling scheme and the number of samples used as described previously, the results of this study could precisely estimate the proportion of students according to their religious characteristics at the national level. In addition, comparisons of proportions can also be made between types of schools and supervisory agencies. Estimates and comparisons outside these criteria must be carried out very carefully, taking into account the adequacy of the sample and the diversity of data/information available.

In testing students' sincerity in filling out questionnaires, two attentional checkers were checked or selected in this national survey. From the first attentional checker results, 359 of them did not pass the attentional checker. Then in the second attentional checker, 314 of them did not pass the attentional checker. Therefore, the data used in the processing and analysis are samples that have passed the two attentional checkers by 2358 student samples. The Margin of Error (MoE) of the realization of the sample that passed the two attentional checkers is 2.02%. Figure 3.3. shows a picture of the sample that passed the attentional checker for each province. The comparison of the number of student populations per province, sample realization, and their proportions in each province can be further seen in appendix 2.



Figure 3.3.  
Distribution of Real Sample Students who Passed the Attentional Checker based on Provinces

Tables 3.6 and 3.7 present the population and the real samples along with their respective proportions according to the education level studied and the supervising institutions.

Table 3.6.  
Population and Actual Sample Passing Attentional Checker Based on Types of School

Types of School	Student Population	% of Total Student Population	Realization of Student Sample	% of Total Sample Realization	MoE*
High School	4.948.019	42,93 %	996	42,24%	3,11%
Vocational School	5.113.400	44,36 %	1077	45,67%	2,99%
Religion-Based School	1.465.445	12,71 %	285	12,09%	5,81%
Total	11.526.864	100,00 %	2358	100,00%	2,02%

Note: MoE = Margin of Error (%) accounted for the 95% confidence level, and it is assumed the proportion of Islamist students is 0.5.

Table 3.7.  
Population and Actual Sample Passing Attentional Checker According to the Supervising Institutions

Supervising Institutions	Student Population	% of Total Student Population	Realization of Student Sample	% of Total Sample Realization	MoE*
The Ministry of Education, Culture, Research, and Technology	10.061.419	87,29 %	2073	87,91 %	2,15%
The Ministry of Religious Affairs	1.465.445	12,71 %	285	12,09 %	5,81%
Total	11.526.864	100,00%	2358	100,00 %	2,02%

Note: MoE = Margin of Error (%) accounted for the 95% confidence level, and it is assumed that the proportion of Islamist students is 0.5.

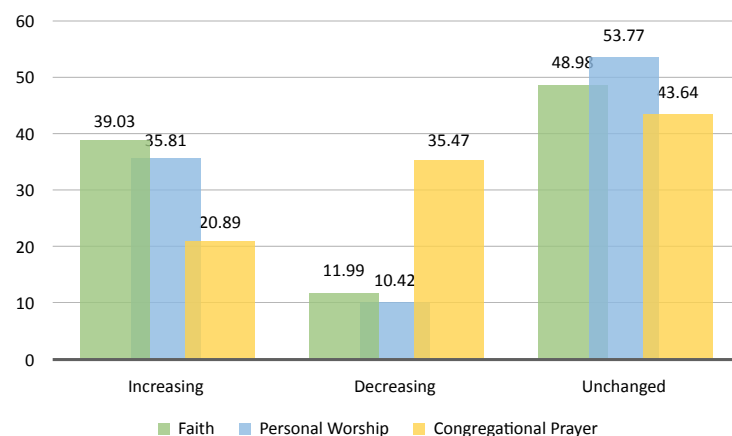
With the sampling scheme and the number of samples used as described previously, the results of this study can precisely estimate the proportion of students according to their religious characteristics at the national level. In addition, comparisons of proportions can also be made between types of schools and supervising institutions. Estimates and comparisons outside these criteria must be carried out very carefully, taking into account the adequacy of the sample and the diversity of existing data/information.

## RESEARCH FINDINGS

### A. Dynamics of Student Religious Attitudes during the COVID-19 Pandemic

In contrast to several other studies that have shown that the COVID-19 pandemic has improved the community's religious life, this survey shows that the impact of COVID-19 on one's religious life is diverse among students. For some students, COVID-19 has indeed increased religious beliefs and the frequency of worship. However, for others, this epidemic has actually reduced religious life. The largest proportion of students stated that their religious life had not changed during the COVID-19 pandemic. This variation is seen in terms of religious beliefs and in the habit of performing individual worship and group worship (Figure 4.1). In addition, it is also important to note that more than 1/3 of students (35.5 percent) stated that their habit of congregational group worship decreased during the COVID-19 outbreak.

Figure 4.1.  
The Dynamics of Students' Religious Life During the COVID-19 Pandemic



Source: PPIM 2021 National Survey Results

Who has experienced increasing or decreasing religious beliefs and personal and group worship habits during the COVID-19 pandemic? To answer this question, we conducted a multiple regression analysis of respondents' answers about the development of religious beliefs and rituals of practicing personal and congregational worship during the COVID-19 pandemic. Table 4.1 presents the results of multiple regression on things that predicted an increase in students' religious life during the COVID-19 pandemic. The dependent variable

described is an index formed by combining the three respondents' answers to questions about the development of religious beliefs and habits of performing personal and group worship during the COVID-19 pandemic.

The regression results show that religion, gender, place of residence, and type of school correlate with students' tendency to experience improvement in their religious life during the pandemic. development index Muslim students had an average score of 0.45 standard deviations higher in the development index of religious life during the COVID-19 pandemic compared to Catholic students. Similar increases were not found in other religious groups. Based on gender, the regression results show that the rise in religious life during the pandemic was found on average for female students. Compared to female students, male students scored 0.19 standard deviations lower in the index of the development of religious life during the COVID-19 pandemic. Another important result is that students living in cities scored 0.1 standard deviations higher in the index of the development of religious life during the COVID-19 pandemic than those respondents living in rural areas.

Table 4.1.  
Dynamics of Religious Life during the COVID-19 Pandemic:  
Multiple Regression Analysis

Variable	Model 1	Model 2	Model 3	Model 4
Islam	0,45***	0,48***	0,47***	0,45***
Christian	0,11	0,13	0,13	0,12
Hindu	0,10	0,17	0,17	0,19
Buddha	0,11	0,18	0,18	0,18
Other faiths	0,65	0,56	0,51	0,70
Exposure to COVID-19		0,09#	0,21**	0,17*
Perception of the dangers of COVID-19		0,01	0,01	0,01
Worse economy		-0,06	-0,07	-0,05
Better economy		-0,00	-0,01	0,00
Stress level		-0,08***	-0,08***	-0,08***
Male		-0,25***	-0,20***	-0,19***
Male * Exposed to COVID-19			-0,25*	-0,25*
Worshipping				0,00
Living in the city				0,10*
Vocational High School				-0,04
Islamic High School				0,12#
Income 1 million – 2.5 million				0,00
Income 2.5 million – 5 million				0,10#

Variable	Model 1	Model 2	Model 3	Model 4
Income 5 million – 7.5 million				0,06
Income > 7.5 million				0,09
Constant	-0,40***	-0,35***	-0,37*	-0,41
N	2.358	2.355	2.355	2.355
R2	0,02	0,04	0,04	0,05

\* p < 0,05 \*\* p < 0,01 \*\*\* p < 0,001

As predicted, the COVID-19 pandemic has affected the religious dynamics of students. However, as Model 4 shows, the impact of exposure on religious life is not the same between male and female students. For female students, exposure to COVID-19 increased the level of religiosity by 0.17 standard deviations in the index value of the development of religious life during the COVID-19 pandemic. However, for male students, exposure to COVID-19 actually had a negative impact on the dynamics of religious life during the pandemic. In addition, the impact of the COVID-19 pandemic on religious life also occurs through the stress experienced by students. One standard deviation of the increase in stress levels due to the pandemic will reduce the religious index by 0.7 points.

To further understand the relationship between these variables and the dynamics of students' religious life during the COVID-19 pandemic, we conducted separate analyses for male and female respondents and groups of respondents living in cities and regencies. As shown in Table 4.2, the results of the analysis show differences in religious life between male and female students and between regions (living in regencies and cities).

Table 4.2.  
Dynamics of Religious Life during the COVID-19 Pandemic:  
Multiple Regression Analysis by Gender and Residence

Variable	Model 5 (Male)	Model 6 (Female)	Model 7 (Regency)	Model 8 (City)
Islam	0,16	0,69***	0,51**	0,29
Christian	-0,12	0,35#	0,08	0,03
Hindu	-0,01	0,26	0,12	0,56#
Buddha	-0,23	0,67	0,29	-0,06
Other faiths	-	-	0,85	-
Exposure to COVID-19	-0,04	0,14*	0,11	0,18#
Perception of the dangers of COVID-19	0,00	-0,00	0,01	-0,01
Worse economy	-0,08	-0,03	-0,04	-0,06
Better economy	-0,01	-0,02	-0,01	0,03

Variable	Model 5 (Male)	Model 6 (Female)	Model 7 (Regency)	Model 8 (City)
Stress level	-0,03	-0,11***	-0,07**	-0,07#
Male	-	-	-0,16***	-0,28***
Male * Exposed to COVID-19	-	-	-0,14	-0,25
Worshipping	0,22***	-0,00	0,00	0,27***
Living in the city	0,01	0,17**	-	-
Vocational High School	-0,08	0,06	0,02	-0,08
Islamic High School	-0,02	0,14	0,13#	-0,09
Income 1 million – 2.5 million	-0,05	0,06	-0,06	0,16#
Income 2.5 million – 5 million	0,09	0,13	0,16*	0,14
Income 5 million – 7.5 million	0,04	0,10	-0,10	0,22
Income > 7.5 million	-0,16	0,24#	-0,07	0,35*
Constant	-0,17	-0,67***	-0,51*	0,00
N	1.049	1.300	1.630	724
R2	0,08	0,06	0,04	0,15

\* p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001. Trust was excluded from all models because there were too few observations when observed based on genders.

Models 5 and 6 show that the influence of religion (chosen religion), exposure to COVID-19, and stress levels due to the pandemic on religious life are not the same between male and female respondents. These three factors affect the religious life of female respondents but not male respondents. For female respondents, Islam is associated with the increasing religious life by 0.67 standard deviations compared to Christianity. For female respondents, exposure to COVID-19 also increased religious life by 0.14 standard deviations. On the other hand, every 1 standard deviation of the increase in stress levels experienced by students during the COVID-19 pandemic was associated with a decrease in students' religious life by 0.11 points. These three effects were not found in male respondents.

Table 4.3.  
Dynamics of Religious Life during the COVID-19 Pandemic:  
Multiple Regression Analysis Based on Religion

Variable	Model 9 (Islam)	Model 11 (Other Religions)
Islam	0,15*	0,30
Christian	0,01	-0,01
Hindu	-0,05	-0,06
Buddha	-0,04	0,15



Variable	Model 9 (Islam)	Model 11 (Other Religions)
Other faiths	-0,06**	-0,02
Exposure to COVID-19	-0,19***	0,01
Perception of the dangers of COVID-19	-0,24*	-0,22
Worse economy	0,26***	-0,00
Better economy	0,10*	0,24#
Stress level	0,04	-0,13
Male	-0,01	-
Male * Exposed to COVID-19	0,03	-0,02
Worshipping	0,15*	0,04
Living in the city	0,06	-0,12
Vocational High School	0,11	-0,07
Islamic High School	0,02	-0,29
Income 1 million – 2.5 million	2.018	337
Income 2.5 million – 5 million	0,10	0,04

\* p < 0.05 \*\* p < 0.01 \*\*\* p < 0.001 (Robust SE). Confidence was excluded from all models because there were too few observations to separate them based genders.

The influence of religion, exposure to COVID-19, and stress levels on religious life were not the same between respondents living in regencies and cities. As shown in Models 7 and 8, the effect of Islam on improving religious life (by 0.51 standard deviations higher than Christianity) was only found in respondents living in regencies but not in those living in cities. On the other hand, the positive influence of Hinduism (0.56 standard deviations higher than Christianity) was only found in those living in cities but not in people living in regencies. Similar to the influence of Hinduism, the impact of exposure to COVID-19 on religious life was also only experienced by those living in cities but not in those living in regencies. However, the impact of these last two factors was only significant at a p-value > 0.1. In addition, the effect of stress on the dynamics of religious life was more substantial in respondents living in regencies than those living in cities.

We further conducted a separate analysis based on the respondent's religion. Table 4.3 shows that the impact of the COVID-19 pandemic on the religious life of students varies between religious groups, especially between those who are Muslim and those who embrace other religions. The impact of exposure to COVID-19, stress levels, and gender were found in Muslim respondents but not in respondents belonging to other religions. Regarding religious practices or views, we also find that religiosity has a positive impact on improving religious life in Muslims but not followers of other religions.

## B. Religion and Health Behavior during the COVID-19 Pandemic

This section discusses how religion influences student health behavior or responses to the COVID-19 pandemic. We suspect that the impact of religion on behavior or health responses to the spread of the Coronavirus is more indirect, namely through the impact of certain religious understandings on the possibility of belief in conspiracy theories or hoax news regarding hoaxes. In turn, the extent to which people believe in conspiracy theories or hoax news related to the Coronavirus would also shape their behavior or health response in dealing with the COVID-19 outbreak. Therefore, we would divide this section into two sub-sections. The first sub-section will discuss the relationship between religion and belief in conspiracy theories or hoaxes related to the spread of the Coronavirus, while the second sub-section will discuss the relationship between belief in conspiracy theories and hoaxes regarding COVID-19 and student health behavior or response in dealing with the outbreak.

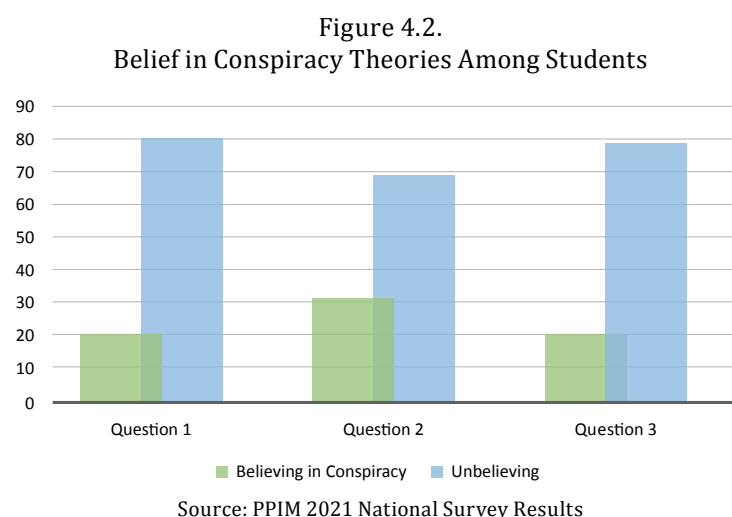
### Religion and Belief in Conspiracy Theories about COVID-19

Conspiracy views about COVID-19 are circulating in the community amidst efforts to prevent and/or overcome the spread of the Coronavirus. Some views or news are caused by a lack of understanding about the Coronavirus, but many of these views are based on an attitude of antipathy, distrust, or suspicion towards health and scientific authorities in facing the threat of danger posed by the COVID-19 outbreak. This impacts efforts to prevent and overcome the spread of the Coronavirus. For example, those who do not believe in the spread of the Coronavirus are not willing to wear a mask or keep a distance or are not even willing to seek proper treatment when exposed to the virus. This subsection will discuss the extent to which religion influences the acceptance of conspiracy theories about COVID-19. We measure trust in conspiracy theories or hoaxes related to the Coronavirus by asking the following three questions:

1. Which of the following statements do you think is true?
  - a. COVID-19 is just a common cold, but it is declared dangerous by certain parties for profit.
  - b. COVID-19 is a dangerous virus, so various parties emphasize the importance of efforts to avoid it.
2. Which of the following statements do you think is true?
  - a. Hospitals treat patients with COVID-19 to obtain funds for handling cases of COVID-19 patients.
  - b. The hospital determines whether a patient has COVID-19 or not based on the patient's laboratory results.
3. Which of the following statements do you think is true?

- a. COVID-19 is a biological weapon in developed countries to weaken developing countries.
- b. COVID-19 originates from a virus that can attack both developed and developing countries.

Respondent's answers to the three questions can be seen in Figure 4.2. Many students believe in conspiracy theories about COVID-19. Regarding the second question, almost 1 in 3 students (31.5%) believed the rumors that the hospital intentionally made patients as COVID-19 patients in order to get profits for handling COVID-19 patients provided by the government. In the first and third questions, although the proportion of students who believe in conspiracy theories is lower than in the second question, the ratio is still worrying. Around 20 percent of respondents believe in conspiracy views about COVID-19.



To further understand the phenomenon of the high school level of acceptance of conspiracy theories about COVID-19 among students, we conducted a regression analysis of the aspects that could affect a person's acceptance of conspiracy theories. Specifically, we examine the influence of religion-related aspects, namely relative deprivation and Islamism. The last thing we analyze, especially among students who are Muslim. In addition, we also looked at the extent to which the level of belief in conspiracy theories about COVID-19 differed between male and female students. Table 4.4 presents the results of the regression analysis.

As seen in Model 12, religious differences affect the extent to which students believe conspiracy theories about COVID-19. Compared to Catholic students, Muslim students had an average score of 0.41 higher on the index of a person's level of belief in conspiracy theories about COVID-19. Another group with a higher tendency to believe in conspiracy theories was students who adhered to the cult. Compared to Catholic students, respondents who adhered

to the faith had an average score of 1.1 higher on the conspiracy theory belief index. Although Christian and Hindu students also have a higher tendency to believe in conspiracy theories than Catholic students, the difference between Christian and Hindu students and Catholic students is not statistically significant.

Model 13 shows that relative deprivation greatly shapes respondents' attitudes towards conspiracy theories. Compared to those without feelings of relative deprivation, students who had feelings of relative deprivation had an average 0.47 higher score on the confidence index in conspiracy theories about COVID-19. This feeling of deprivation more or less explains the effect of religious differences on belief in conspiracy theories. After including this variable, Model 3 shows the coefficient of the influence of Islam on belief in conspiracy theories decreased by about 25%, from 0.41 to 0.31.

**Table 4.4**  
Religion, Collective Deprivation and Conspiracy Theories:  
Results of Multiple Regression Analysis

Variable	Model 12	Model 13	Model 14	Model 15
Islam	0,41***	0,31***	0,18*	0,18*
Christian	0,10	0,10	-0,09	0,10
Hindu	0,19	0,19	0,16	0,17
Buddha	-0,13	-0,16	-0,26	-0,23
Trust	1,10***	-	-	-
Relative deprivation		0,47***	0,40***	0,35***
Exposure to COVID-19			0,01	0,05
Perception of the dangers of COVID-19			-0,13***	-0,12***
Worse economy			0,12**	0,10*
Better economy			0,10*	0,08#
Worship				0,00***
Male				0,08*
Vocational High School				0,07#
Islamic High School				0,07
Private school				0,01
Income 1 million – 2.5 million				-0,11*
Income 2.5 million – 5 million				-0,14**
Income 5 million – 7.5 million				-0,21*
Income > 7.5 million				-0,07
Fatalism				0,08***
Social pessimism				0,06#

Variable	Model 12	Model 13	Model 14	Model 15
Trust (General)				-0,07*
Constant	-0,36***	-0,46***	0,76**8	0,78***
N	2.360	2,353	2.350	2.350
R2	0,02	0,06	0,19	0,21

\* p < 0,05 \*\* p < 0,01 \*\*\* p < 0,001(Robust Standard Errors). Model 2 excludes the belief flow because the number of observations is too small.

Model 14 further examined the influence of religion and feelings of deprivation relative to the level of belief in conspiracy theories by including other variables related to COVID-19. Some people suspected that acceptance of conspiracy theories would be influenced by the extent to which the COVID-19 pandemic affects a person's condition, both health and economics. The regression results show that the economic impact of COVID-19 affects the tendency of students to believe conspiracy theories related to COVID-19. Compared to those whose family's economic condition was relatively stable during the pandemic, respondents who experienced a decline in their family's economic condition had an average score of 0.12 higher in the belief index in conspiracy theories about COVID-19. Model 3 also shows that those whose family economic conditions improved during the pandemic also had higher average scores on the conspiracy theory belief index than those whose family economic conditions were relatively stable. However, Model 3 shows that exposure to COVID-19 had no significant impact on the rejection of conspiracy theories.

The economic impact experienced by respondents more or less explains the negative influence of religion and relative deprivation on respondents' beliefs about conspiracy theories about COVID-19. After considering the impact of COVID-19 on the economic condition of the response family, the coefficient of the influence of religion and relative deprivation decreased in the respondent's level of trust in conspiracy theories about COVID-19 from 0.31 and 0.47 to 0.18 and 0.40, respectively.

Model 15 further examines the influence of religion and relative deprivation by controlling for the economic and health effects of the COVID-19 pandemic and several other variables and socio-demographic conditions that may affect a person's level of acceptance of conspiracy theories. The regression results confirm that religion, relative deprivation, and the negative impact of COVID-19 on the family's economic condition affect the extent to which one will believe in the conspiracy theory about COVID-19.

In addition, Model 15 also shows that the gender and economic level of the respondent's parents affect the respondent's level of acceptance of conspiracy theories. First, compared to female students, male students are more likely to believe in conspiracy theories about COVID-19. Male respondents had an average score of 0.05 higher than the average score of female respondents in the acceptance index of conspiracy theories about COVID-19. Second,

Model 4 also shows that the level of acceptance of conspiracy theories varies between the socioeconomic levels of the respondents' parents. Except for respondents who come from the highest economic level, the higher the economic level of the students' parents, the lower the respondent's acceptance of conspiracy theories about COVID-19. Thus, the relationship between family economic conditions and student acceptance of conspiracy theories about COVID-19 is not linear but resembles the letter U. Respondents from the lowest and highest economic levels are both more likely to believe conspiracy theories about COVID-19 than respondents from middle-income households.

To further understand the relationship between religion and student acceptance of conspiracy theories about COVID-19, we re-analyzed Model 15 on a separate sub-sample of respondents belonging to Islam and other religions. The findings from this analysis are presented in Table 4.5. The comparison between Model 16 and Model 17 shows that relative deprivation, the impact of COVID-19 on the family economy, and parents' income level have different effects on respondents who are Muslim and other religions. In the last group, the impact of relative deprivation on the level of acceptance of conspiracy theories about COVID-19 is only significant at a p-value < 0.10 with a smaller coefficient (0.20 compared to 0.36 for Muslim respondents, or a decrease of around 44%).

However, the economic impact of the COVID-19 pandemic on the family economy was not seen in respondents with religions other than Islam. In fact, for Muslim respondents, the negative impact of the COVID-19 pandemic on the family economy contributed to the increasing trend of respondents' acceptance of conspiracy theories about COVID-19. For Muslim students, respondents who experienced the economic impact of the COVID-19 pandemic had an average score of 0.10 higher on the acceptance index of conspiracy theories about COVID-19 than those whose household economic conditions tended to be stable during the COVID-19 pandemic.

Table 4.5  
Religion, Collective Deprivation and Conspiracy Theories:  
Multiple Regression Analysis Based on Religion

Independent Variable	Model 16 (Other Religions)	Model 17 (Islam)	Model 18 (Islam)
Islamism	-	-	0,05*
Relative deprivation	0.20 <sup>#</sup>	0,36***	0,34***
Fatalism	0,01	0,10***	0,9***
Social pessimism	0,17*	0,04	0,05
Trust (General)	-0.12	-0,06 <sup>#</sup>	-0,06 <sup>#</sup>
Exposure to COVID-19	0,19 <sup>#</sup>	0,04	0,05

Independent Variable	Model 16 (Other Religions)	Model 17 (Islam)	Model 18 (Islam)
Perception of the dangers of COVID-19	-0,08***	-0,13***	-0,13***
Worse economy	0,10	0,10 <sup>#</sup>	0,10*
Better economy	0,04	0,09 <sup>#</sup>	0,08
Worship	-0,00*	0,02	0,01
Male	0,05	0,09*	0,09*
Vocational High School	0,17*	0,06	0,06
Islamic High School	-	0,06	0,05
Private school	0,06	-0,01	0,01
Income 1 million – 2.5 million	-0,21*	-0,09 <sup>#</sup>	-0,08 <sup>#</sup>
Income 2.5 million – 5 million	-0,15	-0,14*	-0,13*
Income 5 million – 7.5 million	-0,06	-0,23**	-0,22*
Income > 7.5 million	-0,12	-0,04	-0,03
Constant	0,33	1,03***	1,04***
N	339	2.018	2.018
R2	0,18	0,21	0,21

\* p < 0,05 \*\* p < 0,01 \*\*\* p < 0,001 (Robust Standard Errors)

In addition, the impact of gender differences on the level of acceptance of conspiracy theories about COVID-19 is only seen in Muslim respondents, but not in other respondents. Among Muslim respondents, male respondents had an average score of 0.9 higher in the acceptance index of conspiracy theories than female respondents. This difference may be due to the different socialization experiences between men and women in society, and the influence of this socialization forms different tendencies between men and women in responding to matters related to public affairs, including government policies. Men, in general, have a greater tendency to pay attention and are also exposed to public matters, especially politics. It is not surprising that men's level of trust in women is usually lower because they are more exposed to news or criticism about the government. These differences, more or less, explain why male respondents have a higher tendency to believe conspiracy theories than women.

However, the impact of school differences and social pessimism was only found in respondents of other religions but not in Muslim respondents. For non-Muslim respondents, Vocational high school students had an average score of 0.17 higher in the belief index in conspiracy theories about COVID-19 than high school students. Similar differences were not found in respondents of other religions. In addition, the impact of social pessimism on the acceptance of conspiracy theories about COVID-19 was also experienced by respondents of other religions. Among non-Muslim respondents, those with social pessimism scored an average

of 0.17 higher in the belief index for conspiracy theories about COVID-19. Among Muslim students, a similar relationship was not found.

Table 4.6  
Religion, Collective Deprivation, and Conspiracy Theories:  
Multiple-Regression Analyses based on Genders

Independent Variable	Model 19 (Male)	Model 20 (Female)
Islam	0,17	0,22*
Christian	0,05	0,15
Hindu	0,04	0,36 <sup>#</sup>
Buddha	-0,17	-0,49***
Relative deprivation	0,33***	0,36***
Exposure to COVID-19	0,06	0,04
Perception of the dangers of COVID-19	-0,13***	-0,12***
Worse economy	0,11	0,08
Better economy	0,02	0,12*
Worship	0,01	0,00***
Vocational High School	0,07	0,07
Islamic High School	0,08	0,07
Private school	0,05	-0,01
Income 1 million – 2.5 million	-0,03	-0,17**
Income 2.5 million – 5 million	-0,11	-0,18*
Income 5 million – 7.5 million	-0,10	-0,31***
Income > 7.5 million	0,21	-0,24*
Fatalism	0,09**	0,08**
Social pessimism	0,05	0,06
Trust (General)	-0,07	-0,07
Constant	0,90***	0,70***
N	1.049	1.301
R2	0,21	0,20

\* p < 0,05 \*\* p < 0,01 \*\*\* p < 0,001 (Robust Standard Errors)

Regarding gender, Table 4.6 presents the re-analysis of Model 15 on male and female respondents separately. The results of the analysis show that male and female respondents have different mechanisms for responding to conspiracy theories about COVID-19. First, the influence of religion on the extent to which a person will believe in conspiracy theories is only found in female respondents but not in male respondents. Among female respondents, Mus-

lim students had a 0.22 higher average score on the belief index for conspiracy theories about COVID-19 than in that of Catholic students. Besides Muslim students, Hindu students also had a higher belief in the conspiracy theory index than Catholic students (a difference of 0.36), but the difference was only significant at  $p < 0.10$ . In addition, Buddhist students had a much lower belief index value in conspiracy theories about COVID-19 than Catholic respondents (difference of 0.49 and statistically significant at  $p < 0.001$ ).

Second, another thing that should also be noted is that among female respondents, compared to those whose household economic conditions were relatively stable during the COVID-19 pandemic, those whose household economic conditions improved during the COVID-19 pandemic actually had an average score. The average with 0.12 is higher on the acceptance index of conspiracy theories about COVID-19. In addition, the negative relationship between parental income level and acceptance of conspiracy theories was only found in female respondents but not in male respondents. For female respondents, the higher parents' income level, the lower the belief index value in conspiracy theories about COVID-19. This is not found in male respondents.

#### Religion, Conspiracy Theories, and Health Responses to COVID-19

Student responses to the COVID-19 pandemic in this study were examined through three behavioral groups: obedience to health protocols, habits of having healthy living behaviors, and willingness to vaccinate.

Table 4.7.  
Student Health Protocol Behavior

Health Protocol	Frequency					Total
	Never	Very Rarely	Sometime	Often	Always	
Washing hands	39 (1.7%)	167 (7.1%)	764 (32.4%)	833 (35.3%)	555 (23.5%)	2358 (100%)
Wearing a mask	19 (0.8%)	70 (3.0%)	385 (16.3%)	710 (30.1%)	1174 (49.8%)	2358 (100%)
Avoiding crowds	198 (8.4%)	361 (15.3%)	968 (41.1%)	538 (22.8%)	293 (12.4%)	2358 (100%)
Physical distancing	82 (3.5%)	174 (7.4%)	720 (30.5%)	761 (32.3%)	621 (26.3%)	2358 (100%)

This study uses four indicators regarding health protocols: washing hands, wearing masks, avoiding crowds, and physical distancing. Student behavior is judged by how often he does these things. Table 4.7 shows that from 2358, it can be seen that the popular health protocol was wearing masks (79.9%). This may be influenced by health promotion and edu-

cation, many of which emphasize the importance of wearing masks. Meanwhile, the most difficult thing for students to comply with was avoiding gathering activities. Around 8.4% of respondents never even avoided it.

The pandemic response that was important to measure was the habit of healthy living behavior because a healthy lifestyle could help maintain the body's immunity so that it is not susceptible to disease. As shown in Table 4.8, exercise is a healthy living behavior that many students have not done; only 11.2% admitted to doing it regularly. While maintaining a balanced diet is good enough for students (56.6%).

Table 4.8.  
Students' Healthy Living Behaviors

Healthy Lifestyle	Frequency					Total
	Never	Very Rarely	Sometime	Often	Always	
Exercising 30 minutes every day	185 (7.8%)	474 (20.1%)	1040 (44.1%)	394 (16.7%)	265 (11.2%)	2358 (100%)
Sleeping 6-8 hours per day	93 (3.9%)	276 (11.7%)	822 (34.9%)	654 (27.7%)	513 (21.8%)	2358 (100%)
Having a balanced and nutritious diet	53 (2.2%)	170 (7.2%)	802 (34.0%)	730 (31.0%)	603 (25.6%)	2358 (100%)

Table 4.9 shows the implementation of the student health protocol by distinguishing schools under the Ministry of Religious Affairs and the Ministry of Education, Culture, Research and Technology. The analysis results show that there is no significant difference between those under both ministries. However, for other health protocols, the analysis results showed a statistically significant difference between the two groups.

Tabel 4.9.  
Comparison of Health Protocols among Schools

Health Protocol	Frequency	Under the Ministry of Religious Affairs	Under the Ministry of Education and Culture	P-value
Washing hands	Never	9 (3.2%)	30 (1.4%)	0.052
	Very rarely	15 (5.3%)	152 (7.3%)	
	Sometimes	108 (37.2%)	658 (31.7%)	
	Often	94 (33.0%)	739 (35.6%)	
	Always	61 (21.4%)	494 (23.8%)	



Health Protocol	Frequency	Under the Ministry of Religious Affairs	Under the Ministry of Education and Culture	P-value
Wearing a Mask	Never	0 (0%)	19 (0.9%)	0.001
	Very rarely	10 (3.5%)	60 (2.9%)	
	Sometimes	64 (22.5%)	321 (15.5%)	
	Often	99 (34.7%)	611 (29.5%)	
	Always	112 (39.3%)	1062 (51.2%)	
Avoiding crowds	Never	27 (9.5%)	171 (8.2%)	0.062
	Very rarely	49 (17.2%)	312 (15.1%)	
	Sometimes	120 (42.1%)	848 (40.9%)	
	Often	55 (19.3%)	483 (23.3%)	
	Always	34 (11.9%)	259 (12.5%)	
Physical distancing	Never	10 (3.5%)	72 (3.5%)	0.540
	Very rarely	23 (8.1%)	151 (7.3%)	
	Sometimes	105 (36.8%)	615 (29.7%)	
	Often	89 (31.2%)	672 (32.4%)	
	Always	58 (20.4%)	563 (27.2%)	

Regarding vaccination, two questions were asked in this survey. The first question is: Have students been vaccinated? The second is the question of students' views on vaccination, whether vaccination is against religion? The results of this survey can be seen in table 4.10.

Table 4.10.  
Frequency of students who have been vaccinated and their views on vaccination

Questions	National (%)		Under Ministry of Religious Affairs (%)		Under the Ministry of Education, Culture, Research & Education (%)	
	Yes	No	Yes	No	Yes	No
Vaccinated	1115 (47,42%)	1240 (52,58%)	1026 (49,5%)	1047 (50,5%)	92 (32,28%)	193 (67,71%)
Vaccination is against religion	304 (12,88%)	1538 (65,17%)	241 (14,8%)	1382 (85,15%)	63 (21,95%)	156 (54,36%)

Table 4.10 shows that the number of students who have been vaccinated is lower than the number of those who have not been vaccinated. Those students are under the supervision of the Ministry of Education, Culture, Research, and Technology and the Ministry of Religious Affairs. It could be because access to vaccination still needs to be improved. However, opinion Table 4.10 shows that fewer students believe that vaccination is against religion than those who disagree with this view regarding students' views on vaccination. This finding seems

good in the students under the Ministry of Religious Affairs and the Ministry of Education, Culture, Research, and Technology.

Table 4.11.  
Health Protocol

Independent Variable	Model 21 (Initial)	Model 22 (Final)
Fatalism	0.024	-
Gender view	-0.011	-
Hoax	-0.098*	-0.1*
Peer Influence	0.074*	0.071*
Perception of the seriousness of COVID-19	0.089*	0.090*
Category of school (Ministry of Religious Affairs-Ministry of Education, Culture, Research and Technology)	0.064	-
Gender (male-female)	0.218*	0.215*
Parent's income	0.019	-
Place of residence (Village-City)	0.223*	0.235*
Religion	0.047	-
Views on the outbreak	0.136*	0.143*
Science View	-0.004	-
Internet access	0.037	-
School Support	0.333*	0.332*
Constant	-1.502	-1.332
N	2354	2354
R2	0.184	0.181

\*p value < 0.05

Table 4.11 presents the results of the initial analysis of respondents' discipline to health protocols. Model 21 (Initial) is based on the selected variables based on behavioral theory to enter the model. The Preliminary Model includes 14 independent variables to see whether these variables are related to the behavior of implementing health protocols in students. The health protocol in this study was measured through the discipline of handwashing habits, wearing masks, maintaining distance, and avoiding gathering. A multivariate analysis was carried out from the initial model that was built to obtain the final model (Model 22).

Based on the final model obtained, it can be seen that the variables that most influence the behavior of health protocols are school support, place of residence (rural-urban), gender, and view of the outbreak. Another significant variable is the perception of seriousness towards COVID-19 and the influence of friendship (peers). School support is measured by asking

whether the school provides information about the spread and transmission of COVID-19. Students whose schools provide this will tend to be better at carrying out health protocols. Students who live in cities will be more obedient to health protocols because the rules in the city are much stricter.

Female students tend to be more obedient in implementing health protocols. If students think that this outbreak is caused by the Sars-CoV2 virus rather than God's punishment or government policy mistakes, they tend to be more disciplined in implementing health protocols. The higher their perception of the dangers of COVID-19, the better the implementation of the health protocol. Regarding the influence of peers, although the effect is not as large as the influence of other variables, respondents whom peers do not easily influence will be better at carrying out health protocols. Those who have an independent attitude will better behave in health protocols. Hoax is a factor that negatively affects the discipline of health protocols. Those who believe in conspiracy theories about COVID-19 will be more ignorant of health protocols.

Table 4.12.  
 Healthy Life Behavior

Independent Variable	Model 23 (Initial)	Model 24 (Final)
Fatalism	0.055*	0.058*
Gender view	0.040*	-
Hoax	-0.044*	-0.044*
Peer Influence	0.103*	0.103*
Perception of the seriousness of COVID-19	0.056*	0.055*
Gender (male-female)	-0.2*	-0.211*
Parent income	0.029	-
Religion	0.003	-
School Support	0.298*	0.298*
Constant	-0.69	-0.622
N	2354	2354
R2	0.061	0.059

\*p value < 0.05

In addition to health protocols, we also analyze students' healthy lifestyles. Table 4.12 presents the results of the initial analysis. As with the previous analysis, the Healthy Lifestyle Behavior Model also begins by selecting the variables in the initial model. The categories of schools (from both ministries), places of residence (Village-City), views on the outbreak,

views on science, and internet access did not pass the selection as variables that could proceed to the final model.

Healthy living behavior is measured by exercising habits, sleeping regularly and consuming a balanced diet. This healthy living behavior variable is measured as a response to the pandemic because healthy living habits will indirectly help against COVID-19 transmission because respondents have a better level of immunity. The initial model shows 9 variables which might influence healthy behavior. However, after further analysis, 6 independent variables influence students' healthy living behavior.

The variables that have the most influence on healthy behavior are school support, the influence of friendships (peers), and the perception of the dangers of COVID-19. Therefore, school support in the form of providing information will encourage students to live healthier lives. Students who have high independence and are not easily influenced by peer pressure will behave more healthily. Furthermore, the more they consider COVID-19 to be something serious, the better they will be at living a healthy lifestyle.

Hoax and gender showed a negative influence on healthy behavior. Hoaxes have a negative effect, so the more someone believes hoaxes, the lower their chances of healthy behavior. The analysis results also show that women would be lower in healthy behavior than men.

Table 4.13.  
 Health Protocol of Muslim Respondents

Independent Variable	Model 25 (Initial)	Model 26 (Final)
Fatalism	0.012	-
Islamism	0.007	-
Gender view	0.001	-
Hoax	-0.087*	-0.089*
Peer Influence	0.057*	0.057*
Perception of the seriousness of COVID-19	0.091*	0.09*
Category of school (Ministry of Religious Affairs-Ministry of Education and Culture)	0.061	-
Gender (male-female)	0.247*	0.245*
Parent's income	0.028	-
Place of residence (Village-City)	0.220*	0.237*
Views on the outbreak	0.129*	0.134*
Science View	0.007	-
Internet access	0.029	-
School Support	0.319*	0.319*
Constant	-1.48	-1.35

Independent Variable	Model 25 (Initial)	Model 26 (Final)
N	2017	2017
R2	0.183	0.181

\*p value < 0.05

Especially for Muslim students, the initial model includes the Islamism variable. However, after further analysis, the final model of a special health protocol for Muslim students shows that gender, residence, view of the outbreak, and perception of the seriousness of COVID-19 are influencing factors. Hoaxes prevent Muslim students from implementing health protocols. Those who believe in hoaxes are less likely to comply with health protocols.

Meanwhile, for Muslim students related to Healthy Living Behavior, the model shows that in addition to school support, peer influence, and perception of seriousness, Muslim students are also influenced by gender views, Islamism, and parental income. Gender has a negative effect on healthy living behavior; in other words, men are more likely to do better in healthy living behavior. Islamism also has a negative influence on students' healthy lifestyles.

Table 4.14.  
Healthy Lifestyles of Muslim Respondents

Independent Variable	Model 27 (Initial)	Model 28 (Final)
Fatalism	0.028	
Islamism	-0.078*	-0.076*
Gender view	0.044	0.046*
Hoax	-0.04	
Peer Influence	0.085*	0.082*
Perception of the seriousness of COVID-19	0.054*	0.059*
Gender (male-female)	-0.192*	-0.192*
Parent's income	0.042*	0.043*
School Support	0.289*	0.292*
Constant	-0.703	-0.751
N	2017	2017
R2	0.064	0.062

\*p value < 0.05

For students of other religions, Table 4.15 shows that hoaxes have a negative effect on obedience to health protocols. The same thing was found in the influence of gender perspec-

tive and parental income. On the other hand, school support positively affects students' discipline to health protocols.

Table 4.15.  
Health Protocol of Respondents of Other Religions

Independent Variable	Model 29 (Initial)	Model 30 (Final)
Gender view	-0.027	-0.032
Hoax	-0.196*	-0.196*
Peer Influence	0.152*	0.151*
Perception of the seriousness of COVID-19	0.075*	0.076*
Gender (male-female)	0.06	-
Parent's income	-0.071	-0.072
Place of residence (Village-City)	0.262*	0.266*
Outlook on the plague	0.154	0.161
Internet access	0.089	-
School Support	0.379*	0.388*
Constant	-1.047	-0.964
N	336	336
R2	0.170	0.169

\*p value < 0.05

Related to healthy living behavior in students of religions other than Islam, Table 4.16 shows that hoaxes and gender have a negative effect on healthy living behavior. Attitudes of fatalism, friends (peer influence), and perceptions about the dangers of COVID-19 are predictors of students' healthy living behavior, which is strengthened by school support.

Table 4.16.  
Healthy Lifestyle of Respondents of Other Religions

Independent Variable	Model 31 (Awal)	Model 32 (Akhir)
Fatalism	0.150*	0.150*
Hoax	-0.16*	-0.16*
Peer Influence	0.222*	0.222*
Perception of the seriousness of COVID-19	0.052*	0.052*
Gender (male-female)	-0.265*	-0.265*
School Support	0.209	0.209
Constant	-0.476	-0.476



Independent Variable	Model 31 (Awal)	Model 32 (Akhir)
N	336	336
R2	0.111	0.111

\*p value < 0.05

Table 4.17 presents the regression results on student compliance with health protocols by distinguishing between schools under the Ministry of Religious Affairs and schools under the Ministry of Education, Culture, Research, and Technology. Fatalism and views of gender equality are essential predictors in Model 33 (MoRA), but are influential in Model 34 (MoEC-RT). In the last model, hoaxes and peer social pressure actually become significant factors. Belief in hoaxes or conspiracy theories has a negative influence, so it can reduce the willingness of students to comply with health protocols.

Table 4.17.  
School Health Protocols under MoRA and MoECRT

Independent Variable	Model 33 (Ministry of Religious Affairs)	Model 34 (Ministry of Education, Culture, Research, and Technology)
Fatalism	0.168*	-
Gender view	0.148*	-
Hoax	-	-0.109*
Peer Influence	-	0.076*
Perception of the seriousness of COVID-19	0.055*	0.095*
Gender (male-female)	0.362*	0.204*
Place of residence (Village-City)	0.279*	0.231*
View on the plague	0.310*	0.131*
School Support	0.49*	0.327*
Constant	-1.452	-1.348
N	283	2070
R2	0.165	0.19

\*p value < 0.05

The model of healthy living behavior for students under the Ministry of Religious Affairs and the Ministry of Education, Culture, Research, and Technology shows several different predictors. As shown in Table 4.18 below, for the MoRA Model, the influential variables are fatalism, perceived seriousness, and school support. Meanwhile, fatalism is not a predictor

for the Ministry of Education, and Culture, Research, and Technology model. In this model, peer social pressure, perceived seriousness, school support, and gender affect healthy living behavior. Gender is one of the four variables that negatively affect the Ministry of Education, Culture, Research, and Technology model.

Table 4.18.  
School Healthy Lifestyle under the Ministry of Religious Affairs and Ministry of Education, Culture, Research, and Technology

Independent Variabale	Model 33 (Ministry of Religious Affairs)	Model 34 (Ministry of Education, Culture, Research, and Technology)
Fatalism	0.175*	-
Peer Influence	-	0.106*
Perception of the seriousness of COVID-19	0.053*	0.061*
Gender (male-female)	-	-0.257*
School Support	0.568*	0.275*
Constant	-0.89	-0.639
N	283	2070
R2	0.091	0.06

\*p value < 0.05

The national student vaccination behavior model shows that the logistic regression model obtained is feasible to use because the Hosmer-Lemeshow p-value is 0.77 greater than 0.05 from the output goodness of fit tests. It also shows that the model is acceptable because it fits the empirical data. The following factors affect students who have been vaccinated or not.

Table 4.19  
Student Vaccination

Independent Variable	Model 37 (all)		Model 33 (Ministry of Religious Affairs)		Model 34 (Ministry of Education, Culture, Research, and Technology)	
	B	OR	B	OR	B	OR
Fatalism	0,124	1,132*	0,131	1,139*	0,029	1,029
Trust in Hoax	0,217	1,243*	0,203	1,225*	0,280	1,323*
Social Pressure	0,047	1,048*	0,031	1,032	0,159	1,173*
Views on the Outbreak	0,023	1,023	0,165	1,180	-1,591	0,204

Independent Variable	Model 37 (all)		Model 33 (Ministry of Religious Affairs)		Model 34 (Ministry of Education, Culture, Research, and Technology)	
	Gender View	0,153	1,166*	0,150	1,162*	0,130
Living in the Village - City	0,571	1,770*	0,581	1,789*	0,422	1,525
JK	0,205	1,228*	0,223	1,250*	-0,157	0,855
Religion vs science	-0,243	0,784	-0,280	0,756*	0,389	1,475
Parents' Income	-0,140	0,869*	-0,137	0,872*	-0,069	0,934
Religion	-0,221	0,802*	-0,202	0,817*		
Internet access	0,405	1,500*	0,563	1,775*	-0,732	0,481
Constant	-1,072	0,342*	-1,190	0,304*	-0,700	0,497
Hosmer&Lemeshow (sig)	11,347 (0,183)		14,115 (0,079)		1516	(0,992)
Nagelkerke R Square	0,116		0,112		0,136	

Note: \* significant at p<0.05

From table 4.19, it can be seen that students who have been vaccinated are influenced by several variables, including fatalism, belief in hoaxes, social pressure, views on epidemics, views on gender, rural-urban, gender, religion vs science, parental income, religion, and internet access. In model 37, which applies to all samples, it can be seen that there are several factors that influence students who have been vaccinated and have not been vaccinated, namely fatalism views, beliefs about hoaxes related to COVID-19, views based on gender, living in rural-urban areas, gender, religion, and internet access. Students who have not been vaccinated have a high view of fatalism and believe in hoaxes.

Data analysis was also carried out separately on school students and students of the Ministry of Religious Affairs. For school and madrasa students, what consistently influences is the belief in hoaxes. Students who believe hoaxes are students who have not been vaccinated. Meanwhile, other factors have inconsistent effects, as seen in the 38 and 39 models.

### C. Islamism and Relative Deprivation among Students

This study indicates that Islamism and deprivation have a relatively significant effect on the likelihood of respondents believing conspiracy theories about COVID-19. Considering the negative impact of conspiracy theories on respondents' adherence to health protocols and building good health behaviors, it can be said that Islamism and relative deprivation indirectly have a major impact on the respondent's health response to COVID-19. This section discusses how spiritual activities and friendship patterns, respectively, contribute to the development of Islamism and relative deprivation among students.

### Contributing Factors to Islamism

Islamism in this study is defined as an attitude that supports the larger role of Islam and its scholars in politics and government. In this study, we created this Islamism index from five indicators that represent their attitudes/positions (agree or disagree) towards the five statements as follows:

1. The application of Islamic law in Indonesia must be supported.
2. A government based on Islamic law and under the leadership of religious experts is the best for this country.
3. Local governments have the right to issue regulations regarding religious life such as the obligation to memorize verses of the Quran for students (Aceh Besar), Muslimah clothing (Cianjur), or *Dadrasah Diniyah* (Pandeglang).
4. The act of bombing or suicide bombing in the name of religion is the real jihad.
5. The system of government recognized by Islam is based on the caliphate.

In this study, Islamism is understood as support for Islamic political ideology. The operationalization of Islamism is in line with the Indonesian political literature and previous PPIM studies which emphasize more on the political expression of Muslims. This operational similarity allows this survey to compare the analysis results in this study with previous studies.

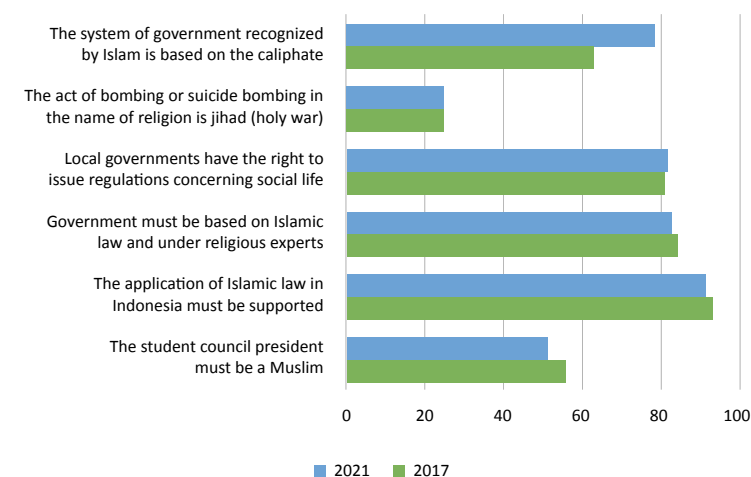


Figure 4.3.  
Islamism Among Students

Figure 4.3. compare respondents' answers to these questions in the current and previous surveys. In general, there is no significant difference in respondents' answers to questions about Islamism in the two surveys except for one question item. The difference is relatively small. However, regarding the question of a government system recognized by Islam, the proportion of respondents who agree that agrees with the statement that the system of govern-

ment recognized by Islam is based on sharia has increased quite sharply, from 63.1% in 2017 to 78.5%. This raises serious questions about the effectiveness of the government’s religious moderation program.

This study tries to answer one of the critical questions: why do some students tend to have a more Islamic religious perspective than others? What factors explain this variation in religious views? This question is essential to answer because religious views (level of Islamism) turned out to be one of the strong predictors that influenced their belief in conspiracy theories and healthy behavior. Thus, if we want to encourage our students to have a more critical and rational view of life and have positive, healthy behaviors, then we need to understand the factors that influence this religious view and think of more appropriate intervention strategies to change it for the better.

To answer the question above—that is, the factors that explain support for Islamism among students—we conducted a multivariate regression analysis by trying to look at a number of factors that predict support for Islamism among high school students (High School/Vocational High School/Islamic Senior High School). This analysis is based on what we assume are theoretically related to support for Islamism, such as perceptions or perspectives on social life, interfaith social interactions, and types of schools. We also controlled for the influence of belief on religious figures, ritual piety, and demographic characteristics in the analysis.

Our multivariate analysis of Islamism is broken down into three models in Table 4.20. Model 40 tried to predict variations in Islamism from their attitudes or views on social life in general. There were five (5) variable indicators that we used to see attitudes or perspectives on social life, namely fatalistic attitudes, social cohesion, gender equality index, social pessimism, and relative deprivation. In Model 41, we tried to predict Islamism from students’ social interaction experiences. Four (4) variables were used to check the experience of this social interaction, namely social pressure, being active in Islamic religious activities at school, the proportion of friends from different religions, and whether the source of religious knowledge comes from the recitation group. Finally, in Model 42, we tried to add the variable type of school to check see if there is any variation in this level of Islamism by type of school.

In model 40, it can be seen that four of the five variables precisely predicted the variation of our Muslim students’ views on Islamism. First, the fatalist attitude operationalized by their level of agreement/disagreement towards a number of statements related to destiny predicts a positive tendency of this attitude of Islamism. As Model 40 shows, those more fatalistic also tended to be more Islamist in their religious views. Those who were more resigned to destiny tended to consider that state conditions would be better if guided by Islamic Sharia and Ulama. Explicitly, this model attempts to measure this prediction and shows that every increase of one standard deviation in fatalistic attitudes is predicted to raise Islamism

attitudes by 0.11 standard deviations. This model shows a powerful relationship between fatalism and Islamism.

Second, Model 40 also showed that those with a more progressive perspective on gender roles tend to have lower degrees of Islamism. Generally, those believing that men and women have the same rights and obligations both in the private (household) and public (political) spheres have a more moderate/liberal religious view, which does not support the involvement of ulama and the dominance of Sharia in political life. The relationship between these two views is so strong that every one standard deviation of the increase in this progressive view lowers the degree of Islamism by 0.22 standard deviations.

Third, we also find that those who are relatively optimistic about social conditions tend to be more religious-political Islamism. This also means that those who are pessimistic about the socio-political environment tend to reject Sharia-based politics and government or refuse the ulama’s role in politics getting bigger and bigger. In more detail, every one standard deviation of the decline in the social pessimism index is predicted to increase the Islamism index by 0.07 standard deviations. This finding indicates that those pessimistic about socio-economic conditions are also pessimistic about the possibility of meaningful changes if politics and governance based on religious Sharia are implemented. In their view, religion is just a political tool that might also only benefit a group of people without providing justice for others.

Table 4.18.  
 Islamism among Students: Multiple Regression Analysis

Variable	Model 40	Model 41	Model 42
Fatalism	0.11***	0.08**	0.08**
Social cohesion	-0.01	0.003	0.004
Gender equality view	-0.22***	-0.21***	-0.20***
Social pessimism	-0.07***	-0.08**	-0.09**
Relative deprivation	0.36***	0.32***	0.31***
Social pressure		0.08**	0.08**
Active in spiritual activities		0.13*	0.12*
Interfaith friends		-0.54***	-0.53***
Study groups as a source of religious knowledge		0.14**	0.13**
Vocational High School			0.04
Islamic Senior High School			0.15
Private school			-0.01
Believe in national religious leaders	0.07*	0.07*	0.07*
Believe in local religious leaders	0.05	0.05	0.05
Worship	0.14***	0.12***	0.11***

Variable	Model 40	Model 41	Model 42
Age	0.003	-0.003	0.001
Female gender)	0.09	0.07	0.07
Live in the village	-0.01	-0.07	-0.07
Parent income	-0.06*	-0.05*	-0.05*
Constant	-0.58	-0.48	-0.58
N	2021	2021	2021
R2	0.15	0.17	0.17

\* p < 0,05 \*\* p < 0,01 \*\*\* p < 0,001, with robust clustered-standard errors

Finally, Model 40 also shows that the perception of economic threats by followers of other religions to Muslims, or relative deprivation, is also very strongly correlated with a student's Islamism index. Those who thought that Muslims tended to be economically disadvantaged by followers of other religions tend to have a religious-political attitude toward Islamism. On average, the Islamism index of those who reported this perceived threat was 0.36 standard deviations higher than those who did not feel threatened.

In Model 41, we also find that those feeling socially independent are generally more moderate in their views on the role of religion in politics. Every single standard deviation of the increase in the social pressure index is predicted to raise the Islamism index by 0.08 of standard deviation. This finding indicates that those with Islamism (wanting the involvement of religion and its ulama in politics) are generally students with a high level of social conformity, meaning that their lives are heavily influenced by their social environment/friendship instead of being independent.

Model 41 also shows that actively joining school Islamic organizations also has the potential to increase the Islamism index. As presented in Table 4.20 above, those who claim to be active in Islamic spiritual organizations generally have an average Islamism index of 0.13 standard deviations higher than those who are inactive. This result is statistically very strong even though it has been controlled by a number of factors that have the potential to bias the relationship between these two variables.

In line with the findings on the role of the Islamic Religious Organization, Model 41 also shows that those who rely on religious knowledge from their own religious study group also tend to be more Islamist. Although this study does not qualitatively observe the material/content of this activity, these results at least indicate that there is a possibility that this content contains messages that encourage Islamism so that those whose sources of religious knowledge depend on the material from the study of their religious study groups are highly likely to believe in this narrative or message.

However, among these variables of socio-religious interaction experience, the strongest predictor that influences the attitude of Islamism of a Muslim student is the experience of

association with other religious groups. Those who interact a lot with adherents of other religions, generally have a lower degree of Islamism. Moreover, the more often they interact with adherents of other religions, the greater their tendency to be moderate. On average, those with twice the number of non-Muslim friends had a 0.54 standard deviation lower degree of Islamism.

Model 42 shows no significant variation in the level/degree of Islamism by type of school. This means that High Schools, Vocational High Schools, or Islamic senior high schools, regardless of public or private schools, generally have relatively the same degree of Islamism. This indicates that Islamism is spread relatively evenly across the various categories of these schools.

Finally, among the control variables that have a statistically strong influence are belief in national religious figures, ritual observance, and socio-economic status. The higher a student's belief in national religious figures is, the more conservative their attitude in viewing the relationship between religion and the state will be. Each level of this belief is predicted to increase the degree of Islamism by a 0.07 standard deviation. In addition, those who are ritually pious are also inclined to Islamism. Those who are ritually pious tend to see religion and politics are correlated. Finally, those with higher socioeconomic status generally have lower degrees of Islamism.

#### Affecting Factors of Relative Deprivation

Relative deprivation generally refers to a condition in which a person or group of people does not have something considered important in life. In this study, deprivation is relatively operationalized by a situation where a person perceives that his religious group is economically disadvantaged compared to other groups. More explicitly, this is measured by the question of whether economically the people (Islam/ Protestant/ Catholic/ Hindu/ Buddhist/ Confucian/ other belief systems) are more economically disadvantaged than other people (Islam/ Protestant/ Catholic/ Hindu/ Buddhist/ Confucian/ other belief systems)". Those who answered "Yes" were given a 1 and those who answered "No" were given a zero. We use the logistic regression estimation technique because the dependent variable is a binary number (0/1).

To predict this variation in views or feelings of relative deprivation, we used some variables as predictors, namely perceptions of social life, experiences of socio-religious interactions, and religious views. The analysis is divided into four (4) models, namely a model with an overall sample (Model 43), a model with a Muslim sample only (Model 44 and Model 45), and a model with a non-Muslim sample only (Model 46).

Table 4.19  
Relative Deprivation among Students: Multiple Regression Analysis

Variable	Model 43	Model 44	Model 45	Model 46
Fatalism	0.25***	0.21**	0.18**	0.57**
Social pressure	0.10*	0.12*	0.09	0.06
Social cohesion	-0.14**	0.11*	-0.11*	-0.34
Gender equality view	-0.16**	-0.16**	-0.09	-0.04
Economic conditions worsen	0.01	0.00	0.004	0.14
Economic gap	-0.38***	-0.39***	-0.35***	-0.10
Social pessimism	0.09	0.08	0.11	0.33
Active in spiritual activities	0.50***	0.55***	0.50***	0.50
Interfaith friends	-1.35***	-1.26***	-1.07**	0.71
Study groups as a source of religious knowledge	-0.15	-0.05	-0.09	-0.92
Income 1 million – 2.5 million	0.01	0.05	0.09	-0.58
Income 2.5 million – 5 million	-0.39*	-0.40*	-0.35*	-1.07
Income 5 million – 7.5 million	-0.28	-0.27	-0.21	0
Income > 7.5 million	-0.11	-0.09	-0.05	-0.33
Vocational High School	-0.01	-0.001	-0.02	-0.58
Islamic Senior High School	0.38	0.32	0.26	-
Private school	0.27*	0.30*	0.31	0.22
Islamism	-	-	0.36***	-
Conservative media	-	-	0.02	-
Conservative Ustadz	-	-	0.17	-
Believing in national religious leaders	0.001	0.01	-0.04	0.40
Believing in local religious leaders	0.01	0.06	0.04	-0.79*
Worship	0.03	0.01	-0.03	0.41
Age	0.03	-0.01	-0.02	0.43*
Female	-0.06	-0.08	-0.09	-0.31
Living in the village	0.22	0.18	0.21	0.13
Constant	-0.62	0.129	0.008	-7.34
N	2350	2021	2021	322
R2	0.097	0.084	0.10	0.22

\* p < 0,05 \*\* p < 0,01 \*\*\* p < 0,001, by robust clustered-standard errors

We find some interesting findings which can be summarized as follow. First, a fatalistic attitude is a strong predictor in predicting this variation in feelings of relative deprivation. As shown in models 43 through 46, on average, every one standard deviation increase in the

degree of fatalism raises the likelihood of feeling deprived by 1.2 times or 20 percent. This effect is greater in the sub-sample of non-Muslim students, reaching almost 80 percent. It means, in general, those who feel deprived are those who easily give up on fate.

Second, the perception of social cohesion also contributes to the emergence of this attitude of relative deprivation. As seen in models 43-46, those who have cohesive feelings as members of society are less likely to feel this relative deprivation. On average, each standard deviation of the increase in the social cohesion index reduces the likelihood of experiencing relative deprivation by 10-14 percent. However, this effect is relatively not too significant, even though the relationship between these two variables is statistically valid. Also, in general, the relationship between these two variables only applies to Muslim respondents. In non-Muslim respondents, there is no strong relationship between this attitude of social cohesion with feelings of relative deprivation.

Third, the perception of economic inequality also contributes significantly to a person's likelihood of experiencing deprivation. Indeed, theoretically, relative deprivation is also contributed by conditions of economic inequality where several groups feel marginalized and do not get their share of the economic pie as their rights. That is why the relationship between these two variables (perceptions of economic inequality and feelings of relative deprivation) is very strong. In the 43-46 model, it can be seen, for example, that those who view economic inequality as severe have a 30 percent higher probability of feeling deprived than those who view only moderate or normal economic inequality. However, like social cohesion, the effect of this perception of economic inequality also only applies to Muslim respondents. Although the relationship between the two variables is powerful for the whole sample, the statistical relationship appears to be more influenced by the dominance of the Muslim sample. A separate analysis of non-Muslim samples showed no statistical relationship between these two variables (Model 46).

Fourth, the experience of social interaction also plays an important role in building this feeling of deprivation. There are two variables whose social interaction has a strong but opposite effect. The variable of activities in religious organizations generally has the effect of amplifying this feeling of relative deprivation. Those active in religious organizations (especially Islamic chaplains) have a more than 60 percent chance of feeling deprived. On the other hand, those who are used to hang out with interfaith friends had lower deprivation attitudes. Those who have friends of different religions are twice as likely to be able to avoid this feeling of deprivation by 70 percent. Thus, in general, plurality in friendship can prevent a student from feeling deprived. However, these two variables are especially true for Muslim respondents. For non-Muslim respondents, the statistical relationship is not visible. One of the reasons is that the sample size of non-Muslim respondents is too small, which makes the coefficient estimate less accurate.



Fifth, especially for Muslim respondents, the attitude of Islamism (views regarding religious political expression) has a strong relationship with feelings of deprivation. Those with Islamism generally feel more deprived than those who are moderate. Every one standard deviation of this increase in the Islamism scale increases the likelihood of experiencing deprivation by more than 40 percent. This statistical relation is so strong that it makes the effects of some predictors of deprivation not statistically significant.

Finally, under certain conditions, dependence on the social environment and views on gender roles also affect the emergence of this feeling of deprivation. Those who are more dependent on social pressures are 10-12 percent more likely to experience deprivation. On the other hand, those who have progressive thoughts about gender roles have the potential to avoid this feeling of deprivation. Every one standard deviation of increase in this gender-progressive outlook is predicted to lower the likelihood of feeling deprived by 15 percent. However, the statistical effect of these two variables disappears when the attitude toward Islamism is controlled.

#### D. Religious Narrative regarding COVID-19 on Social Media

In addition to surveys of students, we also conducted an analysis of religious narratives that developed during the COVID-19 pandemic. In this case, this research was conducted using a data science approach using the data science methodology CRISP-DM (Cross-Industry Standard Process for Data Mining) (P Chapman et al., 2000; Pete Chapman et al., 1999). Social media analysis technology, part of Natural Language Processing, can be used to find important information through social media. There needs to be a mapping of the topics that are the most discussed by the public through social media, without the need to enumerate the messages conveyed on social media one by one. The view of the community as a whole can be done using topic modeling techniques with a clustering approach where text data will be grouped based on similarity in content or widely discussed topics. Furthermore, an in-depth analysis was carried out on the text data based on the topics that emerged from each cluster that was formed. The algorithms used to form these topic clusters are Latent Dirichlet Allocation (LDA) and K-Means.

The analysis is based on Twitter data, with several data collection scenarios according to the needs and objectives of the research as follows:

1. Data was collected from Twitter from January 1 to July 31, 2021. This timeframe was considered when COVID-19 began to enter Indonesia until the period of the Emergency Community Activity Restrictions (PPKM).
2. Twitter data that is processed is the tweet text which is grouped based on the research objectives. The Twitter data does not consider the users' ages or genders, which Twitter's Application Programming Interface (API) does not provide access

to. In addition, the data is grouped by four series of periods to investigate the views of COVID-19 with Religion, Health, and Community Views, among others:

- a. The period from January to March 2020 at the beginning of the COVID-19 pandemic.
- b. The period from March to May 2020 during the COVID-19 pandemic increased.
- c. The period of June-December 2020 was the new normal period (new habits), where people started to adapt to COVID-19.
- d. Period January to July 2021 during the lockdown period until the COVID-19 emergency.

The analysis process was carried out by implementing the LDA and K-Means algorithms to form clusters of topics widely discussed by the public through Twitter social media. These clusters were formed based on coherence value evaluation (CV). Based on the LDA and K-Means clustering results, there are several findings related to the community's views that are widely discussed through Twitter social media. This section discusses the results of an in-depth analysis of the Twitter dataset based on the results of clustering using the LDA and K-Means algorithms.

#### Analysis of COVID-19 Groups and Religion

On the topic between COVID-19 and religion, 2 strong clusters were formed in each cluster. The two clusters are quite far apart, which means that the level of similarity between the clusters is small. Thus, these two clusters have quite different characteristics. In the first cluster, "religious leaders" became the popular subject of many discussions. The community was divided into groups discussing that many religious leaders had become victims of COVID-19 and even died, and many religious leaders were inviting and educating them to apply health protocols. However, there are also several community groups contradicting by stating that there are religious leaders who do not believe in the existence of COVID-19, in which it is considered that religious leaders should support the government. There was a discussion that several religious leaders said that COVID-19 could be overcome by praying and refusing to worship from home, even there were religious leaders who instigated that the prohibition of worshipping in places of worship seemed to hate a certain religion. Many people supported religious leaders as one of the front lines who could provide examples and education in maintaining health protocols and helping the government deal with COVID-19. Religious leaders also set an example by following vaccinations.

Meanwhile, in the second cluster, the word Islam worships is popping up a lot. Many tweets reveal that the COVID-19 pandemic forbids and makes it difficult for Muslims to worship. Regarding the prohibition on Hajj, the prohibition of performing congregational prayers in mosques, no Friday prayers, including during Eid al-Fitr and Eid al-Adha. However, some

tweets say that the limitations of worship are not only experienced by the Islamic religion. For example: "... the only one who gets affected COVID is Muslims? Other religions are also affected." Regarding Fachrul Razi, many tweets about him are his confirmed positive COVID-19. Fachrul Razi invited and encouraged the implementation of worship, including Eid al-Adha and Eid al-Fitr at their respective homes with their families as part of empathy and fighting COVID-19. He issued a circular of guidelines related to Ramadan and Eid al-Fitr worship during the COVID-19 pandemic and invited and coordinated with religious leaders regarding the implementation of worship in the midst of the COVID-19 pandemic. Coordination is also carried out to maintain religious harmony, which is vulnerable to radical understanding and hate speech during the COVID-19 pandemic. The word "inviting the people" emerged from the retweet of the Instagram post @kemenag\_ri in which Minister of Religious Affairs, Fachrul Razi, at that time, urged Muslims to worship at home to prevent the spread of COVID-19. Meanwhile, the Minister of Religious Affairs led by Yaquut Cholil Qoumas did not hesitate to "invite the people" to undergo the COVID-19 vaccination. "Religious leaders have an important role in inviting religious people to participate in the vaccination."

In line with the results of the LDA clustering, "prayer" became one of the words that appeared the most in the clustering results of the K-Means. After being traced, there are several interesting points, such as people believed that the power of prayer was necessary apart from trying to comply with health protocols, for example: "Let's keep praying so that the pandemic will end soon. Amen", "Let's keep praying so that the pandemic will end soon. Amen", "Many people are afraid of COVID. If the ulema and other religious leaders were invited to dialogue from the start, not just an appeal/instruction to invite the ummah to obey the health protocol, God willing, COVID-19 will be able to be handled well by then praying together for the safety of the nation during the pandemic.", "Madam, let's pray. According to our respective religions, the COVID-19 pandemic will end quickly.", and many others. In addition, invitations to pray also come from the government, religious leaders, and public figures to pray together. The invitation to interfaith prayer came from the Ministry of Religious Affairs, which was appealed by the Minister of Religious Affairs, Yaquut Cholil Qoumas, also came from the regional government, the Indonesian Ulema Council, figures such as Ma'ruf Amin, Sandiaga Uno, Ridwan Kamil, and others. The joint prayer that was carried out in addition to asking for the COVID-19 pandemic to be over soon also prayed for the victims of COVID-19. This shows that the level of spirituality of the Indonesian people in dealing with COVID-19 is still high. There are also tweets such as: "reciting the Prayer of *Qunut Nazilah* and its Meaning to Ward off the Corona Virus"

However, the word "Islamic worship" which also appears frequently is related to Muslims whose worship is completely restricted during the COVID-19 pandemic. Various public tweets related to this limitation, for example, are: "But I feel annoyed with this (Covid-19-related

regulations)... I saw the recent news... that's right... Gusrizal also doesn't want the government to ban Muslims from worshipping the mosque. Because it implies as if worship activities are a barrier to efforts to break the chain of transmission of COVID-19.", "COVID prevents Muslims from worshipping because of Eid al-Adha soon", "COVID is the reason for the Government to Ban Muslims from Worshipping in Mosques, a very noble...But why this regulation doesn't apply to other religions as intensively as Islam/Masjid...Why is the Airport or Mall still open? While the mosque is always a target. Remember Allah SWT will do something about this. Islam is united. There are only many other countries that are not Islamic kingdoms,...", "IT IS THE FINAL GOAL OF SPENDING THE EID AL-FITR HOLIDAY TO LIMIT MUSLIMS TO WORSHIP AT THE END OF RAMADHAN AND GOING HOME TO MEET FAMILY BY USING THE COVID-19 AS THE MAIN REASON". There are also those whose views are quite extreme, such as: "Allahuakbar, we must fight against a traitorous regime that closes mosques and forbids Muslims from worshipping. Don't let Chinese communists colonize Indonesia" and "COVID-19 created by Jews prevents Muslims from worshipping in the congregation, ...", Although there are still people who still think positive, such as "To Muslims who still don't believe in COVID, stay away from bad prejudices, especially to health workers who are trying to educate the public to obey health protocols in dealing with COVID."

Thus, it can be said that as far as religion is concerned, society's understanding and response are not necessarily the same. While some invite religious followers to limit gatherings/crowds and joint activities in places of worship, some continue to hold meetings as usual.

## E. COVID-19 and Health Analysis

On the topic between COVID-19 and health, the 5 best clusters were formed, in which clusters 2, 3, and 4 intersect each other. From all clusters, it can be seen that the community actually understands a healthy and clean lifestyle, such as washing hands, obeying health protocols, social distancing, or complying with the recommendation not to go home in an effort to break the chain of the spread of COVID-19. This effort is to protect yourself and your family from COVID-19.

In Cluster 1, the words "Indonesia" and "Healthy" appeared during the RESTRICTIONS TOWARDS COMMUNITY ACTIVITIES. The government and community leaders invited them to maintain health protocols and carry out vaccinations to lead to a healthy Indonesia, a great Indonesia, and a rising economy. In the 2nd, 3rd, and 4th clusters that intersect each other, the word "preventing the spread" is an effort to prevent the spread of COVID-19, which is apparently mostly voiced by the police. In this case, the police exist enough to appeal to the public through social media (especially Twitter). A clean and healthy lifestyle here also appears as an effort to prevent the COVID-19 virus; much education is delivered via Twitter, such as how to wash hands properly to break the chain of spreading COVID-19. Meanwhile,

cluster 5 emerged from an appeal to protect yourself and your family by not going home and having picnics during the COVID-19 pandemic, especially during mobility restrictions. This appeal not to go home came during the Eid moment as one of the steps to prevent the spread of COVID-19.

The process of clustering shows several views from time to time. For the first time, 11 clusters were formed, including clusters 1, 2, and 4 that intersect each other; clusters 3, 6-10 also have similarities, while clusters 5 and 11 have different characteristics. Clusters 1, 2, and 4 showed much public concern at the beginning of the COVID-19 pandemic, including the public's view of health workers who were deemed not good at handling COVID-19 patients, such as: "It makes me scared to go to the hospital; it's not healthy as it actually increases more disease. Hopefully, if this is the case, the medical staff will be educated soon; it seems that they are afraid to treat COVID patients." In addition to people who hope that the pandemic will end soon, such as: "Hopefully this COVID-19 will end soon, O Allah.", "You are in good health. Don't worry about this COVID-19 virus for those of you, okay.. you have God, you have God, right? Ask for forgiveness from Allah *azza wajjala*. Remember that Allah will not give you a disease if there is no cure. The most important thing is that we always live clean and healthy.", calls for having maintained a clean and healthy lifestyle and social distancing have begun to be spread, such as: "Guys, COVID-19 is really not a joke. Please stay at home! Please!", "Let's spread information on COVID prevention on social media, WA groups, line groups, telegrams, etc. Remind each other to apply a clean & healthy lifestyle & apply social distancing.". Clusters 3, 6-10 also showed that many calls and invitations to maintain a healthy, clean lifestyle and maintain health protocols were conveyed. In addition, there are many tweets in this cluster many tweets in this cluster are mutually encouraging to face the COVID-19 pandemic. Meanwhile, in other clusters, appeals not to panic in the face of COVID-19 and self-isolation education have emerged.

In the second period of time, 2 clusters that were formed showed that to prevent and break the chain of spreading COVID-19, complying with health protocols must be done. During this period, there was news of the sale and purchase of health certificates free of COVID by hospital personnel and even being sold in online shops, such as "So your husband just found out that there was the health certificate of COVID-free; the sick letter is sold at Tokp\*d. I bought it several times 2 years ago when doing the thesis", "No wonder mam, COVID-19-free certificates have been traded in the marketplace", "AMEN YAA ALLAH .... COVID-free letters are sold for 70,000-39 million. Just smile. The business of providing a doctor's health/sick certificate has been around for a long time. Pray that the manipulation of the calculation will not be punished heavily. I just regret for those who are doing that :)", "Recently circulating a certificate of healthhealth certificate free of COVID from a private hospital on social media. This letter is sold for Rp. 70 thousand.", "Tokopedia confirmed that irresponsible sellers sell

health certificates free of COVID-19", "This country is too creative or what.. Even the COVID-19 Health Letters are also used for gaining profits. When someone sells it, and it's an official certificate and a COVID-free certificate, I'm surprised because I've never seen that real. It has been normal from the past until now that people have sold sick and health certificates. Don't overplay it."

At the third time, namely during the new normal, 8 clusters were formed. At this time, actually, appeals to continue implementing a healthy lifestyle and complying with health protocols still appear, both from the government, community leaders, and the community itself. Interestingly, in clusters 3 and 6, which overlapped each other, there was a "regional election" which was indeed at this time there were simultaneous elections held. The election mechanism still paid attention to health protocols for both voters and voter officers when voting was carried out so that the elections run smoothly. However, it turns out that the community's response to regional elections during this pandemic also reaped negative sentiments, such as: "And you can't choose both, it's not yet predicted that there will be a COVID cluster as a result of the local elections", "Ignore scary threads, ignore the simultaneous elections", "Don't do the election clusters." Even, there was "Choose to be healthy or the regional election? The COVID-19 pandemic is getting more and more vicious, you know", "People should not come to the General Election instead of getting COVID, unless COVID can take a break during the regional election so that people are safe and stay healthy.", "Why is it difficult for the people's basic right to live healthy to be fulfilled? On the other hand, some individuals seem insistent on holding the election during the critical period of the COVID outbreak?", "Some provinces did not hold elections because they had many COVID-19 cases, let alone those that held the election." However, in this election, the tagline was the Healthy Election, and it became an event to invite the public to continue to comply with health protocols.

At the fourth time, during the social mobility restriction period, 2 ideal clusters were formed as there were not many calls for a clean and healthy lifestyle and applying health protocols. This kind of campaign has decreased over time. At this moment, the main point is the appeal to keep your distance and avoid crowds. It shows that it is actually essential to have a healthy lifestyle and health protocols from the beginning of the COVID-19 pandemic until the social mobility restriction period still continues to emerge, although it is not as massive as at the beginning of the pandemic. Unlike the other three periods, in this fourth period, the two clusters showed that "vaccine" was an important step in protecting public health from the COVID-19 virus. Most Tweets at this point are talking about the COVID-19 vaccination program. This vaccination program is the government's effort to resolve the COVID-19 problem in line with health protocols that are continuously implemented. However, there are pros and cons in the community regarding this vaccination program, including: "in fact, we don't need a vaccine. When blood plasma was taken from a recovered COVID patient, it would be a



vaccine”, “Vaccine is not a solution, but Indonesia needs to pull the brakes immediately. Come on, let’s echo the petition”, “Are you free from smoking, alcohol, etc. after being vaccinated? what’s in the super vaccine guarantees a healthy life?”, “People who spread hoaxes don’t think that there are many innocent and chronically ill people in fact, their lives are threatened because of their hoaxes... For people who have allergies and most likely don’t get vaccinated, it’s scary to see people getting more and more ignorant with COVID. Especially those who feel safe because there is already a vaccine, even though vaccines are not drugs for dialogical patrols with security officers” “Vaccines can be sold at high prices; vitamins cannot be sold at high prices. So it’s a capitalist game. COVID cases in England are not going down, they are going up and much higher than April”, “But for this COVID vaccine, I’m still not sure if I will want it, because the development is relatively “fast”, while the vaccine or drug needs research on its long-term effects., the COVID-19 vaccine definitely does not exist”, and others.

### COVID-19 Group Analysis and Community Perspectives

In this theme, 3 clusters which are formed do not intersect with each other. In the first cluster, the discussion that emerged was about the massive and viral activities of the police on social media when holding social services in order to ease the burden on people affected by COVID-19. In the second cluster, the police are still discussing efforts to ease the burden on people affected by COVID through social assistance. However, there was a collaboration between the Police and the Army in this cluster. In addition, in the second cluster, various parties argue that breaking the chain of the spread of COVID-19 requires the participation of all parties and the discipline to apply health protocols from the community.

Meanwhile, in the third cluster, “hoaxes”, “fake news”, “spread hoaxes” and “hoax spreads” appeared. Simultaneously with the emergence of the word “government”. After being traced, during the COVID-19 pandemic, many rumors and hoaxes were spread. Linking COVID to Religion, Conspiracies, and Politics. Such as: “After Mentioning Genetically Engineered Vaccines, Ichsanuddin Noorsy Now Calls COVID-19 as the way Jews Dictate Muslims”, “Initially there was an ustadz who said COVID19 was God’s army. Then there was the issue of COVID considered as the work of the Jews to destroy Islam. So, the God of Jewish conspiracy destroys Islam. Those are misguided logic. I am feeling so angry... My two-year-old son is reactive.. We are both in self-isolation.. This stupid friend just said COVID is a jewish trick.. Yes, greetings.. I’m struggling as hard as my forehead says it’s the common cold.. Bastard idiots are inhumane.. There was a conversation in the group; those said that COVID was a Jewish conspiracy. They were challenged to go to a referred hospital without a mask and told to stay there. In fact, none is brave. Please shut up already. It’s better to be silent than to spread crazy hoaxes. In addition to those who do not believe that the COVID-19 is true, this is all a Jewish agenda behind the COVID outbreak. This plague is true.... but not a Jewish creation or the

agenda of the Antichrist. Please use your brain to understand”, “I swear I shake my head listening to the Ustadz’s lecture, as the conspiracy doesn’t make sense. The existence of COVID is the agenda to weaken Islam as the WHO is a Jewish stooge, , Besides, Judaism is working with Wahhabis, I don’t know whether parents out there are aware that the conspiracy was broadcasted from WA is a hoax. 60% of my mom’s coworkers is getting COVID, even my mom is infected too. How many times have I got news that says COVID is a trick of the government, and it is made by jews, the wits of random stooges. Suicide incidents will not happen if we have an efficient job”, “Because many make hoaxes about the existence of COVID,, hoaxes that say COVID doesn’t exist,,, those who say COVID is the work of Jews,,, that’s what makes people not believe it, then ignore the procedure,,, yes it ruins everything,, that’s why the hoax maker is the most responsible,, and there are still many people who come out evenly, there are still anti-vaccine people. Some think that COVID is an all-Jewish agenda. X ever suffered this illness, to your family you will not know how worrying it is. Nowadays, many people are traumatized and afraid to go out. @AyikMz @MCAOps COVID, can anyone explain why Jews have a project for Muslims, while there is COVID in Europe too”, “the book experts who spread hoaxes “COVID19 was a global infidel conspiracy”, it is only believed that COVID really existed after there is one family from one of his group members who died of exposure to COVID.”, “From the COVID hoax, COVID conspiracy, vaccine hoax, linked to religion.”, “And in my opinion, COVID-19 is a combination of real (COVID-19 is really real). And Moreover, there is politics along with conspiracy. But I still have doubts about the conspiracy; now, every time I open social media, 70% of it is about the sad news. 30% of it is news about stupid people who still do not believe in COVID & I even believe in conspiracy theories. Oh God, in my family, some believe that COVID is a conspiracy, but I’m obedient to the procedure, I’m really obedient. Nevertheless, I do not want to be vaccinated.”

Clustering based on time division yields some information. At the first time at the beginning of the COVID-19 pandemic, two ideal clusters were formed. In this cluster, “coronavirus” appeared because information about this virus outbreak was still new in Indonesia. The news of the COVID-19 virus was also about the virus in China and started to spread in Indonesia, among others: “They learned from the mistake of naming the MERS virus = Middle East Respiration Syndrome of China.” Hopefully, we will be kept away from the SARS-CoV-2 Virus, which has claimed 1363 victims (0 in Indonesia) to date.”, “The news that a Chinese citizen (WN) was infected with the COVID-19 after returning from Bali made the public nervous.”, “The public is requested to only seek information from official sources. Do not believe the rumors circulating, and do not participate in spreading these rumors. <https://t.co/RnpR-CHkBOFWHO> can’t believe that Indonesia can detect COVID-19, why can’t people be careful? remember every year 2 million Chinese enter Indonesia”, “A community of people takes the initiative to visit people’s homes in Wuhan, China, which has not been reached to check for

early symptoms, may be infected with the Coronavirus / COVID-19 among the residents.”, “The community took the initiative to visit the homes of residents in Wuhan, China, which had not been reached to check for early symptoms of possible Coronavirus infection among the people.”, “The Minister of Home Affairs asked the public not to panic about the Coronavirus issue”, “The Indonesian people panicked after President Joko Widodo (Jokowi) announced that two Depok residents were positively infected with the coronavirus (COVID-19). Since the announcement, many people have stormed retail stores and pharmacies.” At the beginning of the pandemic, panic hit, and people flocked to buy masks, the price of which was raised by several individuals fantastically.

In the second cluster, the appeal of the police here to the public is “so that people do not panic over the phenomenon of the coronavirus (COVID 19) and always keep cleanliness by always washing hands, exercising, and having health by eating food...”. In the first cluster, the words that emerged came from the disinfectant spraying activity carried out by the National Police with the Army and the Regional Government to break COVID-19. This effort required the cooperation and synergy of various parties, including the community. At this time, there have been no massive appeals related to maintaining a healthy lifestyle and appeals to comply with health protocols. People were new to the coronavirus with the confusing issues circulating. At this time, the Government, Police, and Army are currently doing more socialization and education to the public about anticipation and vigilance against COVID-19, and there are no social service activities for people affected by COVID-19. At this time, society also needs this preventive action.

Media collaboration is to convey valid information and not hoaxes, such as: “the media and we as a society must enlighten, not mislead. Share valid info, from the authorized party to provide information. Don’t be based on the ‘unclear information’, Raise Public Sensitivity to Prevent the Transmission of COVID-19”, “Not to mention, there is overdramatizing media which makes people panic. The media should keep reporting, and at the same time, the public also doesn’t overreact. The media are also not massively reporting efforts to find the cure for the COVID virus in various countries, even the number of cases often reported on the number of cases. Try to consider why this Corona case does not seem urgent in Indonesian @jokowi .??? Don’t let people hate you because you are not transparent about this COVID-19 outbreak. The Republic of Indonesia’s government structure system has ranked up to the residential areas. “Press: I ask that broadcast media, especially news-based television stations, do not overdramatize news about the Coronavirus or COVID-19, so as not to create fear and panic among the Indonesian people. The National Police urges and invites the public to anticipate the Corona Virus (COVID-19).)”

In the second period at the beginning of the pandemic, the best 6 clusters were formed, in which clusters 1, 4, and 6 intersect with each other, while the other clusters do not inter-

sect with each other. In clusters interspersed with appeals and invitations to obey health protocols, such as physical distancing and wearing masks. The police also enforce the discipline of health protocols by continuing to give warnings and warnings for those who do not comply with the health protocols. At this time, the social mobility restriction on a large scale was also passed in several areas, which demanded community discipline to comply with health protocols to prevent the spread of the COVID-19 pandemic. In the second cluster, various parties began to organize social assistance to ease the burden on people affected by COVID. In this second cluster, the word “virus” also appears. People expect a vaccine to be invented soon, such as: “WHO must immediately try to create a COVID-19 vaccine.”, “Heard the news that there will also be a vaccine later for the community, especially in cities,... But it is still new, and I do not know when...”, “It’s not enough to apologize, it’s social sanctions. Be a volunteer to test the COVID-19 vaccine, for example”, “looking for the news about the manufacture of the COVID-19 vaccine reminds me of the anti-vaccine movement that was once popular. It seems that the number of infection cases in Europe increases because many people believe in the anti-vaccine movement.”, “Hopefully this will end soon, God, this is COVID. Hopefully, the vaccine will be invented soon or the trend of the number of people infected has started to decline,” “People do not need new clothes, but they need a COVID-19 vaccine”.

At the third time, namely, in the new normal period, 11 clusters were formed where all clusters were separated from each other. The exciting thing is that in Cluster 8, the statement “I don’t believe” appears along with the words “government” and Jokowi.” After it was traced, there is indeed a view “Our society no longer trusts the government’s efforts in dealing with this COVID-19 outbreak,” and there are also groups of people who still do not believe in the existence of COVID-19, such as “in fact, in West Sumatra, there are still many who do not believe in COVID, so proper education is needed. It is easy for the public to understand the dangers of COVID, as most of them only believe in obscure conspiracy stories”, “Because many rural people are not obedient and some don’t even believe in the existence of COVID-19.” However, this strategy makes people lose their trust in the government.

Then in the fourth period, 3 ideal clusters were formed which were separated from each other. At this time, the death rate for COVID-19 victims increased, including the death rate for health workers. Based on this fact, more people are actually complying with the government’s recommendation to apply health protocols. Various efforts were done to reduce the death rate due to COVID-19, such as plasma transfusions for additional therapy for severe COVID patients, policies of social mobility restriction, and administering vaccinations. There is no negative sentiment from the public in this cluster, except for those arguing that the economy was devastated during the mobility restriction period.

In this fourth period, it seems that people are wiser in accepting hoax news, such as: “Covid is a hoax, isn’t it, sir? are you not afraid of it because you have been vaccinated?”, “Why

are there still people who say that COVID is a hoax, huh? Are you waiting to get infected first?”, “Other countries have turned normal; Indonesians are still fussing about COVID, hoaxes, conspiracies, etc.” Confirm the COVID hoax here.. for reference. Never argue with people who don’t believe in the COVID virus. It’s better to shut up or leave it alone.”, “Oh my God, how dare you spread hoaxes carelessly,” “Diligently report hoax accounts that spread conspiracy issues.”

## CONCLUSIONS AND RECOMMENDATIONS

### A. Conclusions

The PPIM 2021 research on Indonesian students’ views on religion, pandemics, and disasters shows several significant findings. In terms of health, the survey results show that the health protocol that students always carry out is mostly wearing masks (79.9%) because health promotions and education mainly highlight the problem of wearing masks. The most challenging thing for students to avoid is having a gathering, as 8.4% of them never even avoid it. This result is in line with social media analysis, where appeals and education to keep health protocols need to be improved and focused on social distancing and avoiding crowds. People already understand and are accustomed to wearing masks and washing hands, but there is still low awareness of applying social distancing and avoiding crowds. The results of the student survey are a representation of a small part of public health behavior during the COVID-19 pandemic.

Other findings corroborate the findings of previous surveys. During the COVID-19 pandemic, the level of Islamism among Indonesian students was still relatively high. Trends from 2017 and 2021 data show it, especially the question of the system of government in Islam that is recognized as being based on Sharia. The act of bombing or suicide bombing in the name of religion is jihad which is recommended in religion. Islamism influences several things, such as health protocols, healthy behavior, vaccinations, feelings of collective deprivation, and the ease with which students believe hoaxes.

From the results of social media analysis, it is not found that there are open invitations to understand radicalism. However, there are indeed religious leaders do not believe in the existence of COVID-19, based on the belief that certain groups made COVID-19 to destroy certain religions. This view spread by these religious leaders can be trusted by the community (including students) because they respect the person who conveys it. The public actually regrets radical actions such as suicide bombings that occurred during the difficult times of the COVID-19 pandemic. The results of a survey of students show an increase in the number

of “agree” to a government system that is recognized as Islam is based on sharia, but it is not found in the results of social media analysis. It could be because of the public nature of social media, which goes viral easily, and leaves a digital footprint, so radical groups communicate implicitly. In addition, media narratives are analyzed only on the Twitter platform. It could be that the narrative of the call for radicalism occurred on other than Twitter platforms that we did not analyze. When linked to the results of social media analysis, the emergence of groups who doubt and do not trust the government in dealing with problems during the COVID-19 pandemic can encourage the public view (including students) that a government system based on sharia is better than this current law.

From a gender perspective, it can be concluded that Indonesian students’ views on gender equality also affect several things; for example, the religious dynamics of students during COVID19 are also different between boys and girls. Men believe more in conspiracy theories, as well as collective deprivation views. In women, the discipline to health protocols was higher than in men, but they differed in their health behavior. Women have lower health behavior than men.

### B. Recommendations

Based on the findings that have been presented, at least some recommendations can be suggested to be carried out. Schools can carry out social interventions for Indonesian students through activities that provide opportunities to work together with different groups. Program campaigns can involve religious leaders and family groups that Indonesian students still trust.

The high level of Islamism requires the planned intervention of the Ministry of Religious Affairs and the Ministry of Education, Culture, Research and Technology with strategic programs, such as revitalizing school religious activities and increasing collaborative work between different groups. Programs such as live-ins can be initiated for collaboration purposes with certain outputs, for example, live-ins for various high school students to improve reading comprehension skills of elementary school students, basic mathematical reasoning, or ready-to-use skills in the frontier, outermost, and least developed regions. Regarding the intervention on hoaxes and the feeling of relative deprivation in students, digital literacy strategies are needed for students. In addition, it is necessary to optimize internet facilities for students throughout Indonesia to reduce Indonesian students’ inequality.

The students’ attitude of Islamism which is also influenced by extracurricular activities related to spirituality, also needs to get the attention of the school/madrasah. Planned and strategic interventions are needed for spiritual activities. The ministry provides alternative guides for religious programs that include introducing the concept of diversity from various religious/belief backgrounds, gender, regional origin, and students’ economic levels through

student problem-based projects. The strategy can also be done by incentivizing religious activities by collaborating with different religious/belief groups. Incentives can be given to supervising teachers or to the initiative administrators at schools/Islamic schools.

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## APPENDIX

Appendix 1. Population, Real Sample, and Proportion in each Province

No	Province	Student Population	% of Total Student Population	Actual Sample Students	% of Total Actual Sample
1	Aceh	224.557	1,95 %	70	2,31 %
2	North Sumatra	784.897	6,81 %	223	7,35 %
3	West Sumatra	276.578	2,40 %	73	2,41 %
4	Riau	302.170	2,62 %	63	2,08 %
5	Jambi	158.457	1,37 %	43	1,42 %
6	South Sumatra	367.003	3,18 %	104	3,43 %
7	Bengkulu	90.962	0,79 %	30	0,99 %
8	Lampung	346.014	3,00 %	105	3,46 %
9	Kep. Bangka Belitung	59.554	0,52 %	29	0,96 %
10	Riau islands	87.695	0,76 %	30	0,99 %
11	D.K.I. Jakarta	409.004	3,55 %	116	3,82 %
12	West Java	2.052.366	17,81 %	478	15,76 %
13	Central Java	1.372.024	11,90 %	393	12,96 %
14	IN. Yogyakarta	161.402	1,40 %	34	1,12 %
15	East Java	1.613.432	14,00 %	422	13,91 %
16	Banten	519.034	4,50 %	124	4,09 %
17	Bali	190.456	1,65 %	50	1,65 %
18	West Nusa Tenggara	249.425	2,16 %	58	1,91 %
19	East Nusa Tenggara	301.017	2,61 %	59	1,95 %
20	West Kalimantan	228.667	1,98 %	45	1,48 %
21	Central Kalimantan	108.813	0,94 %	30	0,99 %
22	South Borneo	159.417	1,38 %	42	1,38 %
23	East Kalimantan	165.583	1,44 %	34	1,12 %
24	North Kalimantan	29.311	0,25 %	23	0,76 %

No	Province	Student Population	% of Total Student Population	Actual Sample Students	% of Total Actual Sample
25	North Sulawesi	119.170	1,03 %	15	0,49 %
26	Central Sulawesi	143.186	1,24 %	37	1,22 %
27	South Sulawesi	421.088	3,65 %	107	3,53 %
28	Southeast Sulawesi	143.550	1,25 %	45	1,48 %
29	Gorontalo	56.782	0,49 %	30	0,99 %
30	West Sulawesi	67.877	0,59 %	27	0,89 %
31	Maluku	99.802	0,87 %	16	0,53 %
32	North Maluku	69.373	0,60 %	30	0,99 %
33	West Papua	46.030	0,40 %	23	0,76 %
34	Papua	102.168	0,89 %	25	0,82 %
TOTAL		11.526.864	100.00 %	3033	100.00 %

No	Province	Student Population	% of Total Student Population	Actual Sample Students	% of Total Actual Sample
20	West Kalimantan	228.667	1,98 %	29	1,23%
21	Central Kalimantan	108.813	0,94 %	25	1,06%
22	South Borneo	159.417	1,38 %	37	1,57%
23	East Kalimantan	165.583	1,44 %	31	1,31%
24	North Kalimantan	29.311	0,25 %	16	0,68%
25	North Sulawesi	119.170	1,03 %	12	0,51%
26	Central Sulawesi	143.186	1,24 %	32	1,36%
27	South Sulawesi	421.088	3,65 %	77	3,27%
28	Southeast Sulawesi	143.550	1,25 %	30	1,27%
29	Gorontalo	56.782	0,49 %	21	0,89%
30	West Sulawesi	67.877	0,59 %	18	0,76%
31	Maluku	99.802	0,87 %	11	0,47%
32	North Maluku	69.373	0,60 %	21	0,89%
33	West Papua	46.030	0,40 %	16	0,68%
34	Papua	102.168	0,89 %	15	0,64%
TOTAL		11.526.864	100,00 %	2358	100,00 %

**Appendix 2. Population and Real Samples that pass the attentional checker along with the Proportion in each Province**

No	Province	Student Population	% of Total Student Population	Actual Sample Students	% of Total Actual Sample
1	Aceh	224.557	1,95 %	47	1,99%
2	North Sumatra	784.897	6,81 %	174	7,38%
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5	Jambi	158.457	1,37 %	35	1,48%
6	South Sumatra	367.003	3,18 %	78	3,31%
7	Bengkulu	90.962	0,79 %	23	0,98%
8	Lampung	346.014	3,00 %	88	3,73%
9	Kep. Bangka Belitung	59.554	0,52 %	20	0,85%
10	Riau islands	87.695	0,76 %	23	0,98%
11	D.K.I. Jakarta	409.004	3,55 %	98	4,16%
12	West Java	2.052.366	17,81 %	376	15,95%
13	Central Java	1.372.024	11,90 %	316	13,40%
14	IN. Yogyakarta	161.402	1,40 %	26	1,10%
15	East Java	1.613.432	14,00 %	329	13,95%
16	Banten	519.034	4,50 %	92	3,90%
17	Bali	190.456	1,65 %	43	1,82%
18	West Nusa Tenggara	249.425	2,16 %	44	1,87%
19	East Nusa Tenggara	301.017	2,61 %	45	1,91%





**Promoting Religious Moderation, Focusing on Education  
to Strengthen Social Stability in Indonesia in the context of COVID-19**

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