

DATA / REPORTS

# **Embracing Uncertainty: How to Feel Emotionally Stable in a Pandemic**

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March 30, 2020









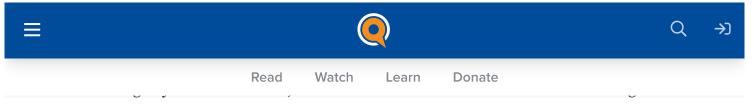




For more on this topic, see Faith in the Time of Coronavirus

Introduction





decision.

People crave certainty in life.<sup>[1]</sup> Certainty gives us a sense of security and the feeling that we have life under control. That is why we check the weather forecast, can't wait for the ultrasound revealing the gender of our child, and make investments with the most stable returns. However, despite constantly seeking certainty for what tomorrow will hold, uncertainty has been woven into the fabric of the universe by the infinite wisdom of Allah. Everything in this life is meant to change except for Allah. The seasons, the colors of the trees, our emotions, our children, and even our personalities are always changing, all with varying levels of predictability. The only absolute constant in the universe is Allah; as He says, "...Everything will perish except His Face."<sup>[2]</sup>

Allah reminds us that He alone has certainty and control over the most fundamental affairs in this life. "Indeed, Allah [alone] has knowledge of the Hour and sends down the rain and knows what is in the wombs. And no soul perceives what it will earn tomorrow, and no soul perceives in what land it will die. Indeed, Allah is Knowing and Acquainted." This verse reminds us not only

of Allah's infinite knowledge but that to human beings nearly everything is indeterminate and uncertain. The date that this world will end, where and when rain will fall (which societies and economies depend on), the fate of the child in the earliest stages in the womb, our jobs and wealth, and the time of our death are all matters that we will never achieve certainty in regardless of advancements in science.<sup>[3]</sup>

The person who tolerates uncertainty and is comfortable with it will be able to function better in life than the one who constantly desires control and certainty. This is because the person who accepts uncertainty acknowledges that they are not in absolute control of their affairs and does not stress over what they cannot control. Conversely, the one who runs away from uncertainty and covets control over the details of their life will find "what they resist to persist." They will only find uncertainty everywhere and be in a perpetual state of worry, anxiety, and stress. Stress is a direct response to situations where people feel uncertain and feel a lack of control.

Uncertainty intolerance can be defined as a cognitive bias that affects how a person perceives, interprets, and responds to uncertain situations on a cognitive, emotional, and behavioral level. People who exhibit high levels of uncertainty intolerance consider it unacceptable that a negative event may occur, however small the probability of its occurrence.<sup>[4]</sup> Decades of research on the



today, through increased anxiety and fear we envision a future far more dismal than it actually will be. This creates a sense of hopelessness and pessimism about the future, which is antithetical to the Islamic worldview of hope and optimism.

The Islamic worldview encourages us to focus our attention and effort where we have more agency and to entrust the affairs that we have no control over to Allah. [7] Thus, we reduce our uncertainty by working hard to increase the probability of success in our sphere of influence, while embracing the only certainty in life: Allah, *al-Haqq*, the Truth that is constant and never changes. We put our uncertainty in the hands of *al-Wakeel*, the One most suitable to entrust our affairs to. The Prophet beautifully explained this mindset and behavior when he explained, "Were you to put your complete trust in Allah, He would provide for you as He provides for the birds. They go out hungry in the morning and return filled in the evening." [8] The birds are completely uncertain regarding the when, where, and what they will catch when they leave their nests in the early morning. However, their uncertainty does not paralyze them but it motivates them to do the only thing in their power: to actually seek out what has been decreed for them.

Similarly, in aspects of life that the Prophet had no control over and was uncertain regarding its outcome, he would make *dua* (e.g., *istikhara*<sup>[9]</sup>) to Allah and move on. Moreover, he was certain that Allah would respond, and commanded us to "Call upon Allah with certainty that he will answer you. Know that Allah will not answer the supplication of a heart that is negligent and distracted." [10] For example, when the wind would begin to blow strongly, he would say, "O Allah, I ask You for its goodness and I take refuge with You from its evil." This is how life is meant to be lived. We do not know exactly what will happen tomorrow, but we do what is in our control to please Allah and maximize positive outcomes while relying on Allah and trusting His divine decree is in our best interest. This is what the great scholar, Ibn Taymiya, referred to when he reflected over what the most important *dua* was. He said, "I realized it was seeking Allah's assistance in trying to please Him. And I realized it was in the *Fatiha*, in the verse, 'It is you alone that we worship and you alone that we rely upon." [11]

#### Coping with uncertainty in especially uncertain times



The spread of the coronavirus has increased the uncertainty all around us. Allah has wisdom in everything He does and how people respond to this uncertainty is a test from Him. Allah says,



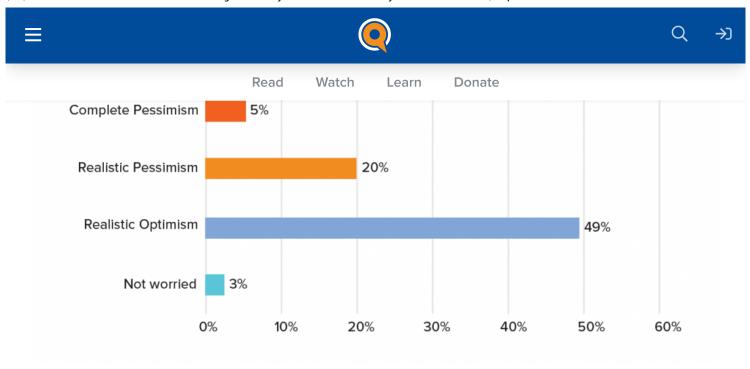
them. We present the results of an empirical study to accomplish our goal in the remainder of this paper.

#### Muslim mindsets regarding the new coronavirus

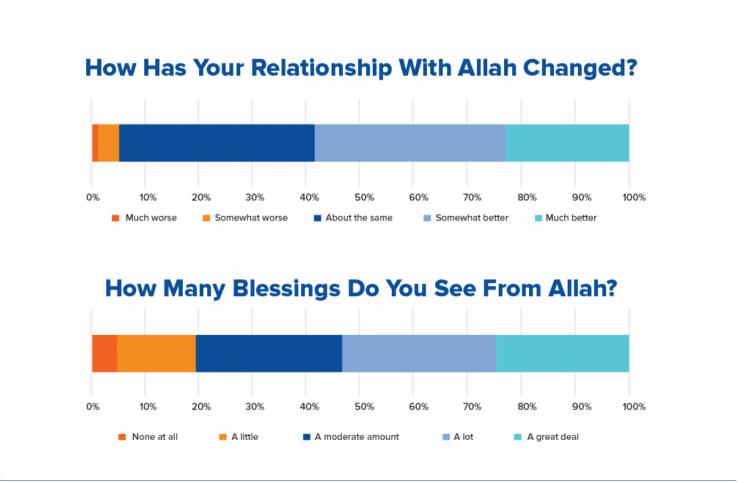
Yaqeen Institute for Islamic Research conducted a survey to better understand the American Muslim reaction to the coronavirus. Just as strict social isolation policies were being implemented in many communities, we received feedback from over 1200 people. Our sample was diverse with respect to age, education level, and race. The largest categories of respondents were 25-34 (36%), held bachelor's degrees (40%), and were South Asian (56%). Females comprised 74% of the sample and 73% of the sample reported praying five times a day. Therefore, it is important to highlight that our sample was generally religious in practice.

By the mercy of Allah, the Muslims in our sample were doing quite well in general. Although people had mixed views on the present and future, many were optimistic and had turned to Allah for support. This can be seen in response to our question asking, "Which of these statements reflects how you believe things will unfold in the next few months?" 3% of people reported not being worried at all and that they felt everything would be fine. These people may have been in a state of denial. 49% were optimistic that despite the many ordeals people will face, things will turn out all right with many positive outcomes. We label this attitude "realistic optimism." However, 20% of people were more pessimistic, saying that things will be bad, as lots of people will suffer from the consequences of the virus (realistic pessimism). 5% were completely pessimistic, believing that things will turn out terribly, with catastrophic loss of life and societal outcomes. Nearly a quarter of the sample said they had no idea what might happen. It is worth highlighting that both realistic optimists and realistic pessimists believed that numerous challenges were on the horizon, but the optimists also saw the potential that good might come out of the situation. Another sign of the spiritual health of the community was that 53% of the respondents said they had witnessed a lot or many blessings from Allah since the emergence of the new coronavirus. Furthermore, over 58% of people said their relationship with Allah had improved over the past week, whereas only 5% said it had gotten worse.

#### How Do You Believe Things Will Unfold?



# **Uncertainty intolerance and mental health**





the sample agreed that uncertainty causes them distress (a score of 4 out of 5). Mental health was gauged with questions regarding the frequency of feeling anxious, nervous, and calm over the past few days. Nearly 60% of participants said they had either never or sometimes felt anxious and nervous over the past few days, whereas 22% said they had felt anxious and nervous half the time or more.

We specifically wanted to test the hypothesis that people's attitudes and coping behaviors regarding the coronavirus could be predicted by their uncertainty intolerance and mental health. We also wanted to understand what other factors contributed to optimistic and pessimistic attitudes. We ran a structural equation model (i.e., a statistical model) to predict the hypothesized process by which an individual's core beliefs (beliefs regarding uncertainty in life) influence their psychological well-being (mental health), which subsequently influences how they see the world (outlook on life as positive or negative) and cope.

We specifically looked at uncertainty tolerance and mental health as predictors of three different outlooks regarding effects of the coronavirus:

- 1) Seeing the potential of blessings resulting from its spread;
- 2) Expressing concern for oneself, others, and society;
- 3) Pessimistically predicting that, over the next few months, things will unfold largely negatively.

The simplified model can be illustrated as follows.

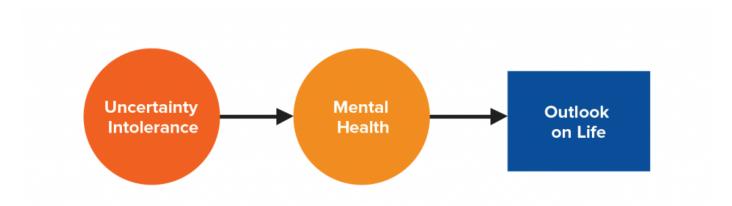


Figure 1: Hypothesized Model









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significantly worse mental health, (B=.68), and worse mental health significantly predicted our three outcomes pertaining to outlook on life. To reword the key finding in a positive manner, higher uncertainty tolerance predicted better mental health, and better mental health predicted a positive outlook on life. Worse mental health was associated with not seeing blessings from Allah (B=-.18), more personal and societal concerns about getting the coronavirus (B=.38), and being more likely to predict things unfolding badly or terribly over the next few months (OR=1.35; 35% more likely). Again, to reword it positively, better mental health was associated with seeing many blessings from Allah, expressing fewer personal and societal concerns about getting the coronavirus, and being more likely to predict things unfolding in a positive manner.

In addition to these effects, there were other important predictors of outlook. Reading the Qur'an frequently was associated with having a more positive outlook, reduced concerns, and seeing more blessings from Allah since the coronavirus spread. Having a grateful disposition was also associated with seeing more blessings. Checking the news more frequently was associated with having a more negative outlook and more concerns. Finally, gender was an important predictor

as well. Although women had slightly higher uncertainty intolerance and worse mental health than males, they were more likely to express realistic optimism than men.

Another interesting and important finding was that both uncertainty intolerance and mental health predicted coping strategies. We conceptualized coping strategies as either being religious (e.g., reading Qur'an, making *dua*, praying), social (e.g., communicating with friends and family), or negative (e.g., excessively purchasing supplies, emotional eating, and watching a lot more entertainment). Both uncertainty intolerance (r=.25) and mental health (r=.29) were correlated with negative coping. This means that people who were less tolerant of uncertainty or had poorer mental health generally engaged in more negative coping strategies. However, they also engaged in religious and social coping mechanisms, suggesting that people struggling with uncertainty and anxiety may engage in both positive and negative coping behaviors. Regardless of an individual's current tolerance of uncertainty, anxiety, or negative coping behaviors, it is important to highlight that all of these beliefs, feelings, and behaviors are malleable and subject to change. We discuss the results in the following section, along with practical suggestions for coping.

#### Discussion of the results



subsequently make.<sup>[15]</sup> Our perception is fundamentally shaped by the core beliefs we have about life, which include our beliefs about uncertainty and our tolerance of it. In line with psychological research and our guiding Islamic principles, uncertainty intolerance is maladaptive and causes high anxiety and worry. This anxiety and worry may turn into specific fears, which skew our perception of reality.<sup>[16]</sup> These perceptions influence the decisions we make, including how we cope with uncertainty. Based on our analysis, we suggest two possible pathways that people can take based on their uncertainty tolerance or intolerance.

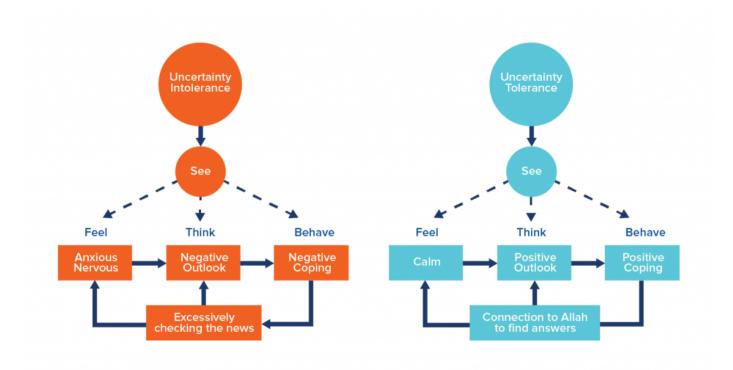
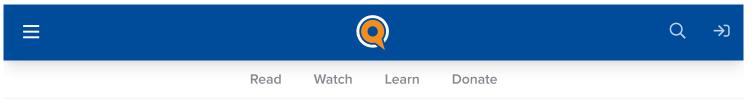


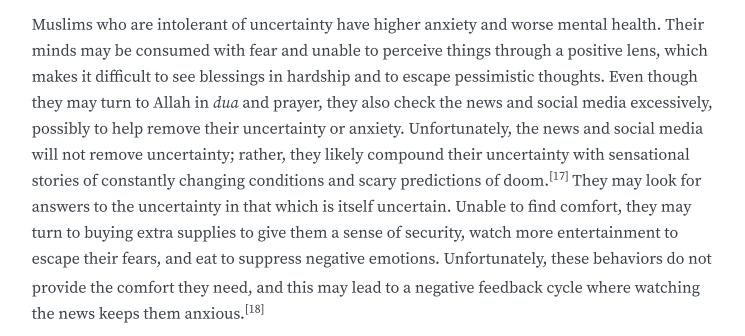
Figure 2: Maladaptive (Orange) and Adaptive (Blue) Uncertainty Pathways

#### The adaptive path



sometimes, they primarily look for answers to the uncertainty in that which is certain (Allah and His Book). They find comfort in these actions and a positive feedback cycle is created that reinforces accepting uncertainty, thus leading to better mental health.

#### A maladaptive path



## The way forward

Just as so many other things in life are subject to change, we can change our perceptions as well. Allah is the Changer of Hearts. We can learn to accept uncertainty and become more comfortable with it. Once this is achieved, we may find ourselves with less worry and anxiety, opening an optimistic world before us. How can we begin this journey to embrace uncertainty (about the world) to attain certainty (in Allah)?

The first suggestion is to remember that, although this life is a test, we are not required to take this test alone. In fact, the intent of Allah is not that we find answers by ourselves but that we seek the answers through Him and His Book. This entails seeking trustworthy information and seeking Allah's help through *istikhara*. Patience is required in this test, as Allah reveals the answers to us when and how He deems appropriate. This is what we mean by embracing uncertainty to attain certainty. The Prophet practiced this daily as he would begin his night



The second suggestion is to take a moment and realize what we can and cannot control. We should neither be arrogant in believing that everything is in our absolute control nor hopeless in believing everything is completely out of our control. We should acknowledge that we have some control over many things, such as how we respond to events in life. At the same time, we should also acknowledge that there are many things completely out of our control. For example, we cannot control what others do or what difficulties will present themselves to us in life. It is in these situations that the only way to enhance personal control is by letting go of control: this is the paradox of surrender. Therefore, rather than trying to control the uncontrollable, surrender (to Allah) involves noticing that there is nothing we can do to change the situation. [20] It is in these events that we completely rely upon and put our trust in Allah. This can be exemplified in the statement that the Prophet would frequently repeat and that he described as one of the treasures of Paradise.

The third suggestion is to engage in specific behaviors that reduce anxiety. Although our minds may attempt to intellectually accept uncertainty, we still need to engage in actions that reduce the likelihood of its onset and reduce the physiological responses that arise in anxiety-inducing situations. These behaviors include specific religious practices and more general practices that both the Islamic tradition and modern psychology have found to be beneficial. We suggest a combination of activities from this list.

- 1. A Spiritual Regimen consisting of:
- Daily prayers
- Daily Qur'an reading
- Dua focused on removing anxiety and relinquishing control<sup>[22]</sup>
- Daily dhikr (e.g., morning and evening)
- Tahajjud Night prayers
- Reading about Allah's Names and Attributes



- Looking at nature and reflecting on its beauty<sup>[24] [25]</sup>
- Islamic mindfulness-based practices<sup>[26]</sup> and mindful eating<sup>[27]</sup>
- Taking regular walks and other exercise
- Drawing and other forms of art therapy<sup>[28]</sup>
- Progressive muscle relaxation<sup>[29]</sup>
- 3. Limiting exposure to unnecessary news and social media

The fourth and most important suggestion is to acknowledge that anxiety can be positive if channeled appropriately. There is no way to eliminate all concerns from our minds, but if we can focus our energy on the one concern that matters most and that we do have control over, then all other concerns will dissipate. The Prophet promised us that whoever took all of their concerns and focused on only one of them, the concern for the afterlife, then Allah would suffice for the other concerns of this life. Thus, our collective fears and anxieties can be addressed if all of our energy is focused on one concern: Is Allah pleased with us? The great scholar ibn Hazm mentioned that he contemplated the concerns of people and the motivation behind their actions

and he found them to be focused on repelling anxiety. He then contemplated until he found the answer to be truthfully turning towards Allah in seeking the afterlife. [31] It is this uncertainty that kindles a fire in the hearts of the believers, as they yearn for the day that they finally hear from their Lord, "Oh my beloved servant, I am so happy with you." The Prophet beautifully taught us this lesson when he was chased out of the city of Taif, bleeding and exhausted. He raised his hands up to Allah and said, "As long as you are not displeased with me, I do not care [what I face]. I would, however, be much happier with Your mercy." [32] It is with this mindset that the Prophets of Allah, despite the countless ordeals they faced, were the happiest of people.

#### **Conclusion**

Uncertainty is a fundamental part of this life and we are not meant to escape it. Rather, we are meant to embrace it and put that which is out of our control in the hands of Allah, while focusing on those matters within our control. "And seek support through patience and prayer. For indeed, it is difficult [to do this] except for the humbly submissive." [33]

In conclusion, we want to highlight the power of prayer and turning to Allah as the antidote for



constitute a stress response.<sup>[34]</sup> However, in a fascinating study on the effect of *salah* on the brain, it was found that when *salah* was performed with deep concentration that the brain showed decreased activation of the prefrontal cortex, which is associated with seeking control. Thus, *salah* makes the believer experience surrender and relinquish personal, willful control. <sup>[35]</sup> Turning to Allah is the one action that we are meant to do with absolute certainty that it will lead to advantageous outcomes in this life and the next. Unquestionably, by the remembrance of Allah hearts are assured. <sup>[36]</sup>

## **Appendix A**



#### **Uncertainty Intolerance**

- 1. Uncertainty makes life intolerable
- 2. My mind can't be relaxed if I don't know what will happen tomorrow
- 3. Uncertainty makes me uneasy, anxious, or stressed.

#### **Mental Health**

- 1. During the past few days, how often have you felt anxious?
- 2. During the past few days, how often have you felt nervous?
- 3. During the past few days, how often have you felt calm?

#### **Outlook on Future**

Which of these statements reflects how you believe things will unfold in the next few months?

- 1. Things will turn out just fine. There is no reason to be worried about anything.
- 2. Despite the many ordeals people will face, things will turn out all right with many positive outcomes.
- 3. Things will be bad, as lots of people will suffer from the consequences of the virus.
- 4. Things will turn out terribly, with catastrophic loss of life and societal outcomes.
- 5. I really have no idea.

#### **Blessings Seen**

How many blessings do you see from Allah in allowing the coronavirus to spread?

(1) None at all to (5) a great deal



- 2. How concerned are you about beloved friends or family getting the coronavirus?
- 3. How concerned are you about the societal consequences of the coronavirus?
- (1) Not at all concerned to (5) extremely concerned

# **Descriptive Statistics for Uncertainty Intolerance & Mental Health**

	Mean	SD	min	max
<b>UI intolerable</b>	2.78	1.23	1	5
<b>UI thinking</b>	2.47	1.25	1	5
<b>UI anxious</b>	3.22	1.25	1	5
Anxious	2.41	1.04	1	5
Nervous	2.19	1.03	1	5
Calm	3.27	1.00	1	5
N	1235			

# **Appendix B**

Full Structural Equation Model

Structural Model	B SE Z-val  0.16 0.03 4.9 -0.08 0.03 -2.9 -0.07 0.03 -2.9 0.12 0.03 3.9 0.02 0.03 0.6 0.36 0.50 0.7  0.38 0.03 13.9 -0.03 0.03 -1.9 -0.04 0.03 -1.9	CE.	<b>Z</b> -	p-
Structural Model		value	value	
Pessimistic Outlook				
Mental Health	0.16	0.03	34.93	0.00
Female	-0.0	80.03	3-2.96	0.00
Reading Qur'an	-0.0	70.03	3-2.32	0.02
Checking the News	0.12	0.03	33.92	0.00
Gratitude	0.02	0.03	30.61	0.54
Intercept	0.36	0.50	00.71	0.48
Coronavirus Fears				
Mental Health	0.38	0.03	3 13.44	0.00
Female	-0.0	30.03	3-1.29	0.20
Reading Qur'an	-0.0	40.03	3-1.42	0.16
Chaoking the Norwa	Λ 10	0.00	0660	0.00

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F	Read	Watch	Learn	Donate			
Mental Health					-0.18 0.03 -5.83	3 0.00	
Female					0.04 0.031.37	0.17	
Reading Qur'an					0.22 0.038.15	0.00	
Checking the News					0.03 0.031.13	0.26	
Gratitude					0.14 0.035.10	0.00	
Intercept					-0.06 0.49 -0.12	0.90	
Mental Health							
Female					0.08 0.033.19	0.00	
Uncertainty Intolerance					0.68 0.0232.49	9 0.00	
<b>Measurement Model</b>							
<b>Uncertainty Intolerance</b>							
UI intolerable					0.60 0.0227.69	9 0.00	
UI thinking					0.80 0.0250.03	3 0.00	
UI anxious					0.81 0.0251.7	1 0.00	
Mental Health							
Anxious					0.88 0.0187.03	1 0.00	
Nervous					0.88 0.0188.3	5 0.00	
Calm					0.70 0.0241.83	1 0.00	
chi2(45) = 228.73, p=0.0000							
Note: All values are standardized	d. SE=S	tandard E	rror.Fit I	ndices: RMSEA			
=.057, CFI=.96							

Notes



- [1] Archy O. de Berker, Robb B. Rutledge, Christoph Mathys, Louise Marshall, Gemma F. Cross, Raymond J. Dolan, and Sven Bestmann, "Computations of Uncertainty Mediate Acute Stress Responses in Humans," *Nature Communications* 7 (2016): 10996.
- [2] Qur'an 28:88.
- [3] Scientific research itself is based on probabilities, not certainties.

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Uncertainty, Worry, and Depression," Cognitive Therapy and Research 28, no. 6 (2004): 835–42.

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- [6] Kristina Maria Hengen and Georg Wilhelm Alpers, "What's the Risk? Fearful Individuals Generally Overestimate Negative Outcomes and They Dread Outcomes of Specific Events," Frontiers in Psychology 10 (2019): 1676.
- [7] Ibn Ata Allah mentions in his book al-Hikam that "Your striving for what has already been guaranteed to you, and your remissness in what is demanded of you, are signs of the blurring of your inner sight [basira]."
- [8] Sunan al-Tirmidhī. The Book on Asceticism, the chapter on Relying upon Allah, no. 2344.
- [9] The Prophet said, "When one of you has a decision to make, he should perform two cycles of prayer other than the obligations, then let him say: O Allah, I seek guidance from your knowledge and power from your might, and I ask you from your tremendous favor. Verily, you have power and I do not have power, and you know and I do not know. You know the unseen. O Allah, If you know that this matter is good for my religion and my livelihood and my ending (or

he said: if it is better for my present and later needs), then decree it for me and make it easy for me and bless me in it. But if you know that this matter is evil for my religion and my livelihood and my ending (or he said: if it is worse for my present and later needs), then divert it from me and keep me away from it, and decree for me what is good for me and make me content with it." Sahih al-Bukhari, no. 1113.

- [10] *Sunan al-Tirmidhī*, no. 3479.
- [11] Qur'an 1:5.
- [12] Qur'an 2:155.
- [13] See Appendix A for the full set of items. Three items were used to measure uncertainty intolerance and mental health. Cronbach's alpha for uncertainty intolerance was .78 and for mental health it was .86. Factor analysis also revealed that the items represented the underlying constructs with good model fit.
- [14] The model fit the data very well using numerous fit indices (RMSEA=.057, CFI =.96). See Appendix B for details.



[16] We understand that the data are correlational and the relation between anxiety and fear is not necessarily causal in nature. We posit that general anxiety may turn into specific fears in some people, whereas other people may have a specific fear that leads to general anxiety. Alternatively, there may be a third factor that contributes to increases in both of these variables.

- [17] We are not advocating that people ignore the news completely. However, we caution against obsessively checking the news and social media, especially sensational stories that are simply meant to captivate an audience through shock and awe. Rather, people should seek out information on an as-needed basis from authoritative sources that provide important updates, including the CDC and other agencies.
- [18] Daniel R. Anderson, Patricia A. Collins, Kelly L. Schmitt, and Robin Smith Jacobvitz, "Stressful Life Events and Television Viewing," *Communication Research* 23, no. 3 (1996): 243–60.
- [19] Sunan an-Nasa'i, the book of the night prayer and voluntary prayers during the day.
- [20] *The Crisis Kit*, PositivePsychology.com, 2020, <a href="https://positivepsychology.com/wp-content/uploads/The-Crisis-Kit.pdf">https://positivepsychology.com/wp-content/uploads/The-Crisis-Kit.pdf</a>
- [21] Sahih al-Bukhari, the book of tawheed, the chapter on Allah is ever hearing and ever seeing.
- [22] See here for lists of *dua* and explanations: <a href="https://yaqeeninstitute.org/collections/faith-in-the-time-of-coronavirus/">https://yaqeeninstitute.org/collections/faith-in-the-time-of-coronavirus/</a>.
- [23] Courtney Ackerman, "Gratitude Journal: A Collection of 67 Templates, Ideas, and Apps for Your Diary," *Positive Psychology*, February 18, 2020, <a href="https://positivepsychology.com/gratitude-journal/">https://positivepsychology.com/gratitude-journal/</a>.
- [24] Courtney Ackerman, "What Is Kaplan's Attention Restoration Theory (ART)?," *Positive Psychology*, October 7, 2020, https://positivepsychology.com/attention-restoration-theory/.
- [25] The Qur'an encourages us to reflect on nature in hundreds of verses as a way of connecting with Allah.
- [26] Justin Parrott, "How to Be a Mindful Muslim: An Exercise in Islamic



Medicine, ttps://www.dukeintegrativemedicine.org/dukeimprogramsblog/wp-content/uploads/sites/4/2017/08/Mindful-Eating-Transcript.pdf.

[28] Elaine Mead, "15 Art Therapy Activities, Exercises & Ideas for Children and Adults," *Positive Psychology*, March 25, 2020, https://positivepsychology.com/art-therapy/.

[29] "Progressive Muscle Relaxation Script," adapted from *The Anxiety & Phobia Workbook* by Edmund J. Bourne, https://www.law.berkeley.edu/files/Progressive\_Muscle\_Relaxation.pdf.

- [30] Sunan Ibn Majah, the book of asceticism, chapter on concern for the dunya.
- [31] Ibn Hazm, Mudāwāt an-nufūs fī tahdhīb al-akhlāq (Medina: al-Maktabah al-Salafīyah, 1970).
- [32] See the complete *dua* here.
- [33] Qur'an 2:45.
- [34] Achim Peters, Bruce S. McEwen, and Karl Friston, "Uncertainty and Stress: Why It Causes Diseases and How It Is Mastered by the Brain," *Progress in Neurobiology* 156 (2017): 164–88.
- [35] Andrew B. Newberg, Nancy A. Wintering, David B. Yaden, Mark R. Waldman, Janet Reddin, and Abass Alavi, "A Case Series Study of the Neurophysiological Effects of Altered States of Mind during Intense Islamic Prayer," *Journal of Physiology-Paris* 109, nos. 4–6 (2015): 214–20.

[36] Qur'an 13:28.

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**Authors** 



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