



# What are the odds you will find the true religion?

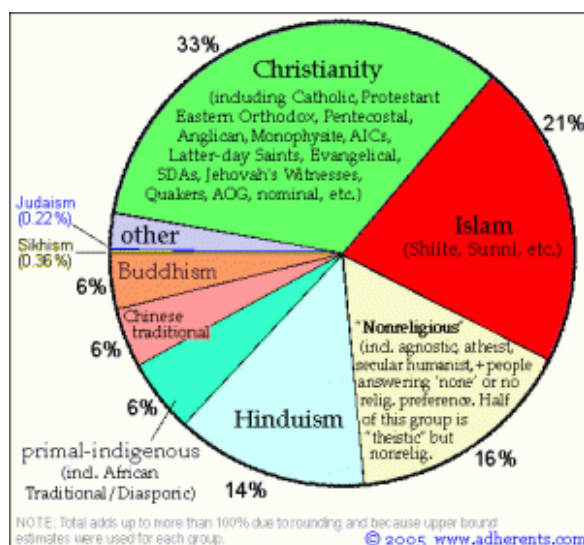
What are the chances that if you were born today, you will eventually practise the correct religion? Your challenge is two-fold. You need to know which religion is true, and you need to be in an environment, society, or culture that allows you to be exposed to this true religion. Imagine if Christianity is the one true religion and you are born in Yemen. The odds that you would learn about Christianity and finally embrace it in such an anti-Christian environment would be small. Unlucky you.

Considering there are over [4,200 religions in the world](#), what are the odds that one of them is the true religion? A devout Christian will tell you that Christianity is the true religion. Her prayers are answered, her God is her consoler and protector, her life has been deeply enriched by her Christian faith, and Christianity's holy texts are sacred. But a devout Muslim will genuinely also tell you likewise: that Islam is the true religion because his God answers his prayers, his God consoles and protects him, his life has been deeply enriched by his Islamic faith, and that Islam's holy texts are sacred.

The sad reality is most religions are either in conflict or are incompatible with one another. A Christian and a Muslim cannot both be correct: only one of them can be saved - or perhaps not even them if Hindus or Buddhists have their way.

With so many religions in the world today, what is the probability that, if you were born today, you would be able to find and practise the true religion and thus be saved from damnation? I was intrigued if I could calculate the probability of being saved.

So, let's get started. Christianity, Islam, Hinduism, and Buddhism are the four main organized religions in the world today. These four religions are the faiths for nearly 70% of the world's population. Consequently, I will make my first assumption: only Christianity, Islam, Hinduism, and Buddhism are considered candidates as the true religion, ignoring the possibilities that the other 4,200 or so religions could be true. Working from a position of maximum ignorance, I will further assume equal probability for each of those four religions being the true one.



The major religions in the world today (chart from adherents.com).

This means Christianity, Islam, Hinduism, and Buddhism each has a 25% chance of being the true religion:

$$\begin{aligned}
 &P(\text{Christianity is true}) \\
 &= P(\text{Islam is true}) \\
 &= P(\text{Hinduism is true}) \\
 &= P(\text{Buddhism is true}) \\
 &= 0.25
 \end{aligned}$$

where the notation  $P(\text{outcome})$  denotes the probability of an outcome.

Whether you become a Christian, Muslim, Hindu, or Buddhist depends largely on where you will be born. If you are born in Pakistan, for instance, chances are

much greater that you will be a Muslim than if you were born in the US or Sweden. The probability you will be born in a particular country (X ) is given by:

[math]

$$P(\text{Born in X}) = \frac{\text{X's population}}{\text{total population of all countries}}$$

[/math]

Now, having been born in a particular country, what are the chances you will become a Christian, Muslim, Hindu, or Buddhist in that country? To compute this probability, I used the data from the [World Values Survey Wave 6 \(2010-14\)](#) which surveyed nearly 80,000 participants from 56 countries (with the combined population of over 5 billion). I used the World Values Survey data, as it is more accurate. The survey goes down to the ground and asks how religious people are and in what faith, rather than depending on the religion stated on one's birth certificate. A person may be born, for example, a Hindu but who is really a practicing Christian.

Table 1. Your probability of being born in a country (Pb) and being either a Christian (PC), Muslim (PM), Hindu (PH), or Buddhist (PB) in that country of birth. All values are in per cent.

<b>Country</b>	<b>Pb</b>	<b>PC</b>	<b>PM</b>	<b>PH</b>	<b>PB</b>
Algeria	0.8	0.5	99.5	0	0
Argentina	0.8	71.9	0.2	0.3	0.5
Armenia	0.1	0.5	0.1	0	0.2
Australia	0.5	48	1.1	0.2	1.7
Azerbaijan	0.2	1.7	97	0	0
Belarus	0.2	85.8	0.3	0	0
Brazil	4	56.8	0.1	0	0.2
Chile	0.3	76.3	0	0.1	0
China	27.3	3.5	0.6	0	9.7
Colombia	1	75.1	0.1	0	0.1
Cyprus	0	68.3	24.6	0	0
Ecuador	0.3	64.7	0	0	0

<b>Country</b>	<b>Pb</b>	<b>PC</b>	<b>PM</b>	<b>PH</b>	<b>PB</b>
Estonia	0	33.1	0.2	0	0.1
Georgia	0.1	94.8	3.4	0	0
Germany	1.6	29.5	5.7	0.2	0.2
Ghana	0.5	80.3	11.4	0.1	0
Hong Kong	0.1	18.8	0.1	0.1	11.3
India	24.8	7.6	14.4	74.4	1.6
Iraq	0.7	1	99	0	0
Japan	2.5	0.6	0	0	39
Jordan	0.1	3	97	0	0
Kazakhstan	0.3	28.4	50.3	0.1	0.1
Kyrgyzstan	0.1	6.7	89.4	0.1	0.1
Lebanon	0.1	36	55.1	0	0
Libya	0.1	0	98.2	0	0
Malaysia	0.6	7.3	63.1	7.6	20.3
Mexico	2.4	72.9	0	0	0
Morocco	0.7	0.3	99.3	0.1	0
Netherlands	0.3	28.3	2.1	0.3	0.3
New Zealand	0.1	56.5	0.7	1.1	0
Nigeria	3.5	45.7	43	0.1	0
Pakistan	3.6	0.1	99.7	0.3	0
Palestine	0.1	0.2	99.7	0	0
Peru	0.6	88.1	0.1	0.2	0
Philippines	2	71.2	6	0	0
Poland	0.7	95.1	0	0	0
Romania	0.4	97.6	0.3	0	0.1
Russia	2.8	64.1	7.5	0	0.2
Rwanda	0.2	77.4	5.2	0.1	0
Singapore	0.1	16.1	16.2	7	29.4

<b>Country</b>	<b>Pb</b>	<b>PC</b>	<b>PM</b>	<b>PH</b>	<b>PB</b>
Slovenia	0	67.1	1.7	0.1	0.1
South Africa	1	47.5	1.5	1.7	0.4
South Korea	1	37	0.1	0	21.2
Spain	0.9	74.3	0.2	0.1	0.2
Sweden	0.2	2.1	2.4	0.2	0.1
Taiwan	0.5	28.4	0	3.6	26.6
Thailand	1.3	0.6	2.2	0.1	96.3
Trinidad and Tobago	0	62.1	7.4	20.7	0.1
Tunisia	0.2	0	100	0	0
Turkey	1.5	0	99.1	0	0
Ukraine	0.9	83.6	0.6	0.1	0.3
United States	6.3	47	0.3	0.4	0.6
Uruguay	0.1	24.1	0	0	0
Uzbekistan	0.6	3.4	95.7	0.2	0.1
Yemen	0.5	0	100	0	0
Zimbabwe	0.3	90.2	0.7	0	0.1

Let's take Malaysia as an example: the probability of you being born in Malaysia and becoming a Christian in this country is computed simply as:

$$\begin{aligned}
 &P(\text{Born in Malaysia and a Christian}) \\
 &= P(\text{Born in Malaysia}) \times P(\text{Christian in Malaysia})
 \end{aligned}$$

What if you were born instead in another country, say, in the US? In the same manner, we determine the probability as:

$$\begin{aligned}
 &P(\text{Born in the US and a Christian}) \\
 &= P(\text{Born in the US}) \times P(\text{Christian in the US})
 \end{aligned}$$

Consequently, the probability of you becoming a Christian is simply the summation of all probabilities you would be a Christian in every country you could be born in:

$$P(\text{Christian}) = \sum_{X=1}^{56} P(\text{Born in X and a Christian})$$

where there are 56 countries covered in the World Values Survey.

Finally, the probability of you being a Christian and Christianity being the true religion is simply:

$$P(\text{Christian and Christianity is true}) = P(\text{Christian}) \times P(\text{Christian is true})$$

where  $P(\text{Christianity is true})$ , as stated earlier, is 0.25 (which is the same with the other three religions).

The above steps are repeated for determining the probabilities for Muslims, Hindus, and Buddhists.

Table 2 shows that you have very little chance (between 1 to 6%) of finding the true religion. Why is this possibility so remote?

Table 2. The probability you will find and practise the true religion.

<b>Religion</b>	<b>Probability (%)</b>
Christianity	6
Islam	4
Hinduism	5
Buddhism	1

Take China and India, for example. Both countries comprise nearly half of the world's population. This means there is nearly a 50% chance that you would be born in either China or India. If you were born in China, chances are great that you will be either an unbeliever (*e.g.*, atheist or agnostic) or practice one of the

religions that is not Christianity, Islam, Hinduism, or Buddhism. But if you were instead born in India, Table 1 shows a near 75% chance that you will become a Hindu. So, depending on where you will be born and the probability of you adopting a particular religion in that country, probability theory tells us that you have very little chance being saved because you are unable to find the true religion.

## **...you have very little chance (between 1 to 6%) of finding the true religion...perhaps even much lower if other religions were considered**

The probabilities in Table 2 may actually be too large, considering the generous assumptions I had used. For instance, I considered only four religions out of 4,200 or more religions as potential candidates to be the true religion. What if [Judaism](#) is the true religion? What about [Sikhism](#), [Baha'ism](#), or [Confucianism](#)? These aforementioned organized religions are among the ten most widely practiced in the world. So, if I were to consider these other religions, the probability that one of them is true would be far smaller than 25%, a value that I had used earlier.

Furthermore, Christianity is not a homogenous group. It is a group of many Christian denominations, some of which in contradiction with one another. Nonetheless, Christianity can be broadly grouped into [Orthodoxy](#), [Protestantism](#), and [Roman Catholicism](#). Likewise for Islam, which is generally made up of [Sunnis](#) and [Shiites](#) (as well as the Sufis whom no one seems to like).

So, if I were to add the other religions to the list of true religion candidates and further distinguish between the various Christianity and Islamic groups, the values in Table 2 would be much, much smaller.

My calculations, despite using generous assumptions, show how extremely remote a person, born today, can find the true religion and thus be saved. God may be all-loving, all-powerful, and all-present to some believers, but God has surely made it really difficult for us to find Him. Perhaps religious people might even take my calculations as a warning of the importance of them spreading their faiths, since finding the true religion appears so remote.



Which way to the Truth? So many religions, so many routes, so many choices (photo from radhanathswamionline.com).

I like to end my article by emphatically pointing out that my calculations are merely an interesting, thought-provoking academic exercise and not to be taken, God forbid, as mathematical proof of anything, science or supernatural.

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## **We Malaysians have the right to be naked and to wear short skirts**

Do we have the right to wear what we want?

Take the [recent incident at Sabah](#). On May 30, 2015, ten foreign tourists stripped naked for photography on top of [Mount Kinabalu](#), Sabah. This nudity act was scandalous for two reasons. First, their act was deemed sacrilegious because Mount Kinabalu is deeply revered and sacred to Sabahan natives. Second, their nudity act was said to have angered the gods of the sacred mountain, and as a consequence, an earthquake, measuring 5.9 on the Richter scale, was sent by the



gods. The earthquake claimed 18 lives, including six children, all of whom were at Mount Kinabalu at that time.



Dress code violation #1: Ten foreigners atop Mount Kinabalu, getting ready to strip naked. Their activities were believed to have caused the wrath from the gods of the sacred mountain. The wrath came in the form of an earthquake a few days later, claiming 18 lives (photo from loyarburok.com).

Whether you believe this earthquake was caused by supernatural beings or by the movements of Earth's tectonic plates is irrelevant. It is the perceived violation and offence that these tourists had brought upon the natives of Sabah that is important. But yet, from the perspective of the ten nudists, they may think that it is their right to wear what they want (or in this case, not wear anything) and that the natives of Sabah should not impose their moral values, which the tourists have no believe in, upon them. So, who is right?

Consider a [second recent incident](#) involving Suzanna Tan and the [Road Transport Department \(RTD\)](#). On June 8, 2015, Suzanna was refused service at an RTD office because she had violated the department's dress code by wearing a skirt that did not extend below her knees, so she was made to wear a sarong before she could be served. Embarrassed and humiliated, she vented her frustrations on Facebook, and her post went viral. Suzanna's incident drew the attention from various people including that from [Datuk Noor Farida Ariffin](#), a member of the [Muslim moderates G25 group](#). Datuk Noor Farida deplored RTD's dress code (as well as that in other government agencies), saying this is an example of "the

infiltration of religious conservatism into public administration”.



Dress code violation #2: Suzanna Tan had to wear a sarong to cover her legs before she could be served at the RTD (Road Transport Department) office (photo from [themalaymailonline.com](http://themalaymailonline.com)).

The religion in question is of course Islam. The dress code at all government agencies are heavily biased towards that dictated by Islam. So, should Suzanna, being a non-Muslim, follow RTD's dress code? Like the case for the nudists at Mount Kinabalu, does Suzanna have a right to dress how she likes?

Whether we realize it or not, we all have conformed to some form of dress code. What we wear is dictated by social norms, culture, and for those who are religious, religion.

But at the same time, we have the right to dress in whatever way we want. We have the right to be naked on the top of any mountain, sacred or not, or appear even in a bikini at the RTD's office. No one can refuse to recognize us simply on the basis that we dress differently from that expected.

Consider, for instance, the male natives of [Papua New Guinea \(PNG\)](#). One traditional wear of the men there is [koteka or penis sheath](#) which they wear over their genitals. To them, wearing the koteka is part of their identity and culture. It would take a very brave person to tell them otherwise.

A PNG man, wearing a koteka, would probably be deemed offensive if he walked

up Mount Kinabalu or entered an RTD office, but to him, he is acting perfectly normal according to his culture. He has all the rights to wear his koteka wherever he goes even if his attire is regarded inappropriate to others. Who are we to tell people of another culture that their culture is wrong or incompatible?

So, what we have here is a conflict of moral values, where the values of one group of people are being imposed on others. The natives of Sabah are imposing their moral values on others, dictating how people should behave on the sacred mountain. And in the case of RTD (as well as other government agencies), the moral values of Islam are imposed on others such that they dictate how and what people should wear.

How then do we resolve conflict of moral values? Although we each have the right to dress how we want, this does not mean we have to express this right all the time. We need to consider very carefully if expressing our right to dress would unnecessarily cause conflict with other groups of people who do not share our moral values.

So, yes, the ten nudists on top of Mount Kinabalu have the right to be naked, but they should have considered if stripping naked just for the sake of having the ultimate group selfie is more important than the sentiments of the local natives. Just as people would not strip in a mosque, temple, or church, these ten tourists should not have been naked on a mountain considered sacred by Sabahans.

Many people, including these Sabahan natives, identify themselves through their religion, so for anyone to disrepute that would exacerbate group conflicts. Complying with the dress code (by not being naked, for instance) on Mount Kinabalu is not about comprising your rights or moral values, but it is about recognizing differences exist and yet showing respect to these differences.

But the Islamic-based dress code imposed by RTD is a different case. Are RTD offices somehow sacred grounds to Muslims? If not, why Islamic-based dress code? Why not base a dress code on, say, traditional Chinese wear? Or better still, for the sake of national unity, RTD can rotate on a per monthly basis dress codes based on Malay, Chinese, Indian, Sabahan, then Sarawakian culture? That would certainly be innovative, perhaps even fun.



Malaysian unity only comes when differences between peoples are respected, not removed (photo from [thestar.com.my](http://thestar.com.my)).

If Malaysia is to be progressive, we need to create a common platform upon which all Malaysians from all culture, religions, and beliefs can come and work together to achieve a higher goal that transcends each group's interests. Yes, we each have rights, but that right needs to be exercised in view of respecting, not removing, the differences between us.