## OpenTheo

## Can We Quantify the Good Life? | Tyler VanderWeele

July 1, 2021



## The Veritas Forum

PART OF A SPECIAL 6-WEEK SERIES | We know a lot about what makes us healthier. But what about what makes us happier? In this episode, we interview Dr. Tyler VanderWeele, an epidemiologist and the Director of the Human Flourishing Program at Harvard University. He and his research team are working towards identifying the behaviors that make our lives better — not just physically, but emotionally, mentally, and relationally, too. Our conversation centers around one of his data's main findings: regularly attending religious services can help you live seven years longer. Like what you heard? Rate and review us on Apple Podcasts to help more people discover our episodes. And, join the conversation on our Instagram, @veritasforum. You can see our full slate of speakers and learn more about our production team and co-sponsors at beyondtheforum.org

## **Transcript**

It was 1855 when the first scale was brought over from Germany to the United States. It was a penny scale. You put a penny in it, and it would tell you how much you weighed.

Five years later, penny scales were everywhere. Grocery stores, train stations, movie theaters, but not in doctor's offices. Penny scales weren't medical devices.

They were more amusement park attractions. If you guessed your weight, and you guessed right, you got your penny back. But of course, the house almost always won.

By 1913, the first bathroom scale was introduced. Now, in the privacy of your own home for \$10, or about \$270 in today's money, you could find out how much you weighed. And today, a little over a century later, almost every home in America has a bathroom scale in it.

And it's not just your weight that you can measure about yourself at home. The list of things is endless. Your heart rate.

The hours and quality of your sleep. Your blood oxygen levels. Your screen time.

Your steps. The number of flights you climbed. And how many calories you burned.

You can even track the number of times you coughed, or how long it has been since you washed your hands. In theory, all of this self-tracking allows you to learn more about yourself, and helps you to meet your goals. It promises you'll be healthier because you'll be able to improve your physical and mental performance.

But what about tracking things that could make you happier? We study physical health very well, and people care deeply about these things. But they care about more than that. They care about being happy.

They care about having a sense of meaning and purpose in life. They care about trying to be a good person. They care about their relationships.

So, you know, why aren't we studying these things as rigorously as we do physical health? That's Tyler Vanderwill, an epidemiologist at Harvard who is trying to quantify human flourishing, or what we're calling "the good life." And he's my guest today. His research shows that there are things that you can do today that not only can improve the quality of your life, but can lengthen your life, too. This is Beyond the Forum, a new podcast from the Veritas Forum in PRX that dives into life's biggest questions.

For our first season, we're asking what is the good life, and how can we live it? And we're talking with some of our favorite thinkers. I'm your host, Bethany Jenkins, and I run the media and content work at the Veritas Forum, a Christian nonprofit that hosts conversations that matter across different worldviews. Tyler directs the Human Flourishing Program at Harvard, where he and his team use an approach that pulls from the humanities, philosophy, and theology.

They try to find where there might be consensus among these traditions when it comes to human flourishing, and they've come up with five domains. First, happiness and life satisfaction. Second, meaning in purpose.

Third, mental and physical health. Fourth, character in virtue. And fifth, close social relationships.

The argument is not that these five exhaust what flourishing means, but that any conception of flourishing, while it might include a whole lot more, would also very likely include these five domains as well. And Tyler doesn't stop there with just defining human flourishing. He and his team are trying to figure out what kinds of behaviors make achieving human flourishing possible too.

In other words, how can we quantify flourishing so that we can know if we're going in the right direction? Sometimes there are competing views on a particular matter as to what gives rise to a sense of meaning and purpose. And then, you know, I do think the scientific methods that we use and our quantitative studies can at least help partially

resolve or provide evidence to help resolving some of the disputes. But asking these questions and studying human flourishing wasn't always what Tyler thought he'd be doing.

My academic path was somewhat circuitous. I began studying mathematics as an undergraduate and then ended up doing a second to bachelors in philosophy and theology. Eventually, we had a doctoral program in finance realized that that was not for me and then completed doctoral studies in biostatistics.

And my dissertation was very theoretical note data analysis whatsoever. But in the years that followed, joined the faculty at the University of Chicago, started doing some work in perinatal and psychiatric epidemiology, looking at birth outcomes and mental health. And then around that time started to do some reading on religion and health.

Tyler says that his faith has always been an important part of his life, but he never came across any research connecting his faith and his work until after he finished grad school, where he stumbled upon some research about religious participation. Much to my surprise, there were hundreds, even thousands of studies on this topic, which I had never come across during my graduate studies in public health. And the open question seemed to be that while it is clear that religious participation was associated with better health, researchers still wondered, "Is that relationship causal? And if so, what are the mechanisms?" And those were precisely the types of methodological questions I was trying to address in my own work on methodology.

And so I thought, "Well, if I ever come across good data, I'll perhaps try to address these questions." And that data was elusive for years, until he was at a faculty meeting at Harvard School of Public Health. He'd gotten a grant from the Templeton Foundation to run a seminar on religion and health, and announced it at the meeting. Afterwards, one of the faculty members came up and said, "You know, Tyler, somewhere buried in the nurses' health study, which is this large cohort study of 100,000 nurses that's been collected for over 40 years at Harvard, there's a question on religious service attendance.

No one's ever used it. You should take a look." So I did, and sure enough, it was there, and it was measured repeatedly every four years, so I had the perfect data set waiting for me at Harvard." And his research using that data set has revealed that the outcomes of religious service attendance on human flourishing are astounding. So over the years carried out a series of analyses, we found that religious service attendance was associated with about 30% reduction in all-cause mortality over 15 years, about a 30% reduction in the incidence of depression, five-fold reductions in suicides.

That means you're five times less likely to die of suicide, and you're 30% less likely to be depressed. And when Tyler talks about all-cause mortality, he's talking about all the ways that you might die, from disease, from illness, or from any other death, even

natural old age. And what his research suggests is that if you attend religious services regularly for 15 years, then you're 30% less likely to die from any of those causes than someone who doesn't attend religious services.

And when you add up that 30% year after year over a lifetime, he told me that 30% reduction translates into about seven years of additional life. And he and his team continue to look into more associations, too. We hosted a Veritas Forum in January 2019 at Harvard Medical School.

It was called "Should Science and Religion Mix?" and Tyler was one of the panelists. In that forum, he said that religious service attendance is associated with a whole slew of positive outcomes. The fact that religious service attendance, there is evidence that it is associated with lower depression, less suicide, less substance abuse, greater happiness in life satisfaction, more meaning and purpose, greater generosity, volunteering, civic engagement and pro-social behavior, less crime, less divorce, and greater social support.

These other public health outcomes are significant. I asked Tyler why I hadn't heard more about them. It's a good question, and I think there are multiple forces at play.

You know, I think some of it is just the research has not widely known. A lot of it until recently was actually coming out of sociology departments or psychology departments rather than within public health. I think there's still some skepticism over, you know, by these associations really causal, but the evidence would say strengthened really considerably over the last decade or two.

At the forum, the question of trustworthy, rigorous data was a major point. Tyler's dialogue partner was Dr. Richard Sloan, Chief of Behavioral Medicine at Columbia, an author of Blind Faith, the unholy alliance of religion and medicine. You can probably tell from the title of his book that he's not the biggest fan of mixing religion and public health, and he opened the forum by dismantling the logic of a bunch of popular level books and bad studies that did try to mix them.

But when it came to Tyler's research, Dr. Sloan praised it for its rigor and trustworthiness. In the literature, and I think Dr. Vanderwiel said it well, the best studies are those that look at the relationship between church attendance, religious attendance, and mortality, and although he's very modest about it, this study in which he was the principal investigator is in my estimation, the most definitive study demonstrating that there is a relationship between attendance at religious services and mortality. Very large study, very well conducted.

Tyler's research suggests a causal relationship between religious service attendance and various positive health outcomes like longer life. But causality is really difficult to prove. For example, it is very hard to prove that A and only A, not C or D, causes B. So Tyler, like most researchers, controls for known variables that will affect his results, like

socioeconomic status or educational attainment or family medical history.

He knows these can impact length of life, so he accounts for them in his research. Tyler says he'll often control for 30, 50, or even 100 variables at times. But there are unknown variables that impact outcomes too.

Every survey data set has them, because some questions are difficult to ask or anticipate in a survey. For example, if you were designing a questionnaire, how would you ask someone about their personality? What about how conscientious or kind they are? To account for these unknown factors, Tyler introduced a new statistical measuring tool a few years ago. He calls it the E value, and it's basically a way of combining and trying to control for all the unknown variables that might have an impact on the outcome that he's trying to measure, in this case, length of life.

So Tyler applied this combination factor, this E value, to his nurse's data set, and he found that religious service attendance was a stronger, much stronger indicator on a longer life than all the unknown variables combined. And not only on a longer life, but also on less depression and lower risk of suicide. This E value is what makes Tyler's research extremely unique.

So it doesn't definitively answer the question, do we know it's causal, but it strengthens the evidence. Tyler's work is so groundbreaking, that one of his papers has been cited over 1,000 times. To give you perspective, if a paper's been cited over 100 times, it's probably in the top 1% of scholarship.

His research is on the far end of rigorous and trustworthy. But there's another reason you might not have heard of this quantifiable link between religious service attendance and public health. We live in a pluralistic society, and mixing religion and medicine can be tricky.

In the forum, Tyler talked about some of these complications. The question then becomes, should these conversations take place, by whom and what contexts, are these discussions at all relevant, should they ever take place in, say, an annual physical exam? Why might we ever think this is appropriate? What are the objections to such conversations? And I think the objections are important. The objections are very sensitive to topic, perhaps especially so, in the clinical context.

Clinicians and patients will often have very different religious beliefs, complicating these discussions further. The ethical issues are complicated. There's potential for abuse of power, proselytization.

And clinicians really are not trained to do so. So the case against is potentially compelling. But the reality is, for some of us as patients, we already mix religion and medicine.

There have been reviews that have indicated that somewhere between 75 and 80% of American patients use religion to cope with illness. For probably 35 to 40% of those, it is the most important factor they use in their coping. Another survey of the general public indicated that about 70% of people say their religious beliefs would guide their medical decisions if they were critically injured.

Yet another survey inquired about decision making and assessing the importance of various factors in decision making amongst cancer patients. Patients listed faith in God as the second most important of these seven factors. Physicians seventh out of seven.

So patients at the very least are mixing religion and medicine. And when it comes to religious service attendance at least, the health outcomes are too large to ignore. Religious community is a powerful social determinant of health.

It is common. This country, about 36% of the population report attending religious services on a weekly basis. These things have a powerful effect on population health.

And I think one that is too often ignored by the public health community in trying to understand how population health is shaped. He proposes a few simple ways for doctors to incorporate a spiritual assessment for their patients in a neutral way. One that doesn't ignore his research, but also takes into account the pluralistic society in which we live.

For the approximately half of all Americans who do positively identify with a particular set of religious or spiritual beliefs, but do not attend services are not part of a community, it would seem reasonable in those contexts to at least raise this question of community participation. As something that can be a meaningful form of community, but also powerfully promotes health and well-being. One would of course want to be very careful about those who have had negative experiences in religious communities, abuse or negative interactions.

So how would we really know? Well, some recommendations are to take a brief spiritual history. And that spiritual history can be boiled down to just two questions. First is faith, religion, spirituality, important to you in health and an illness, or has it been important to you at other times in your life? Second, do you have someone to talk to about spiritual matters, or would you like someone to talk to? These questions are very brief, they could be incorporated into a social history, they're relatively neutral and unoffensive, they can be asked even if the clinician and patient have different beliefs, they can help uncover negative painful past experiences and the offer of a referral to a chaplain or a counselor could be made.

And they can also make clear someone's religious or spiritual identity, and the attendance could be raised or perhaps even encouraged as appropriate. But what about atheists and agnostics? Are they somehow at a peculiar disadvantage here? What if they participate in garden clubs or volunteer at health clinics or engage in other group

activities? There is evidence that these other forms of community participation also affect health and well-being. The effect sizes tend to be smaller than is the case with religious community, but in our still meaningful in our analyses with the nurses, health study data, the effects on either mortality or suicide reduction for other forms of community life, we're not as substantial as with religious communities.

More research on this topic is needed, but my speculation would be that those forms of community life that more closely resemble a religious community that perhaps have a shared set of values, a shared mission and purpose, maybe a history of the organization that extends beyond the lifetime of an individual are likely to have larger effects on health and well-being than those communities that don't have these other features. So that maybe participation in a volunteering organization would have larger effects on health and well-being than showing up for a weekly card game. Even that, I think, will have some effect, but my speculation would be smaller than forms of community life with common values with a shared purpose.

Hi all, I'm Carly Uschelman, the assistant producer of Beyond the Forum. If you're loving the podcast so far, we want to invite you to continue these important conversations on our Instagram account at Baritas Forum. Follow us right our podcast season to access behind the scenes content, exciting giveaways and conversations with other podcast listeners, like you.

Thanks for tuning in and enjoy the rest of the show. I opened our conversation today by talking about all the things we can measure about ourselves, most of them having to do with our physical health. But many of us want more than just a fit body.

We want meaning and purpose. We want happiness. We want to live longer and enjoy more time with our loved ones.

What Tyler is doing isn't yet tech savvy. He's not figuring out a way for your smartwatch to automatically track if you've attended a religious service, but he is helping us to figure out what activities and behaviors lead to flourishing. And one of those factors is religious service attendance.

Interestingly, the same outcomes are not associated with private practices of religion. If you look at sort of self-assess spirituality or amount of time spent privately in prayer or meditation or extent of religious coping, you may be seeing a little bit of a fact, but not these large effects that you're getting with communal religious participation. I think there's something really important about that communal religious experience that has profound effects and health and well-being.

Of course, people don't usually make decisions about religion based on health outcomes, but based on their experiences or their values or truth claims or evidences or relationships. But for those who do subscribe to a particular religion, one health question is, do you practice that religion in the context of community? My conversation with Tyler reminded me of my conversations with both Lydia and Kurt in our first two episodes. Community is central to human life.

Human beings are relational creatures. We live and we die best in the context of community. Part of what enables people to do hard things from the time we are born to the time we die is when we find ourselves in a community of people who are bearing witness to our doing a hard thing, and they are confident that we can do this.

What Tyler added to these conversations about community was two things. The connection between religious community participation and human flourishing and the quantifiable data to back it up. One other thing stood out to me too.

Tyler is studying human flourishing and our season is about the good life. Are they the same thing? I think they cover similar but not identical conceptual ground. So I would say what the good life captures in some sense beyond flourishing is the whole history of a person's life.

The notion of a good life is really a life well lived. With flourishing we are often thinking about how is life going right now. In our studies we do try to track that over time and examine the determinants of these various aspects of flourishing.

But in some sense the good life can only be fully assessed retrospectively at the end of life. We find that notion in Aristotle as well. So if you were to think about a person's flourishing and trajectory over the whole course of life and trying to make sense of it and understand it in its fullness, I think that moves one towards that notion of the good life.

So in a way if you want to pursue the good life in the long run, then your best bet may be to see human flourishing in the here and now. And to do that it's worth your time to pay attention to what behaviors and activities lead to human flourishing, like the ones Tyler is researching. And by the way, if you don't attend a religious service now, or maybe you used to but never found the right community and are feeling a bit compelled by this episode, you might explore your curiosity by talking with a friend.

Chances are you know someone, a colleague, a neighbor, a childhood friend, involved in a particular religious tradition. Ask them about it. Go to services with them.

Or if you live near a university or a college student or a professor, we work with lots of campus ministries across the country. You can reach out to one near you to get some recommendations. And as always, you can DM us on Instagram, a Veritas forum if you have any questions.

Next week we talk with Dr. Sethian Davodas about curiosity, wonder, and awe in all places, math. Even if you, like me, never took a single math lesson college, I promise you'll find our conversation fascinating, because Sethian's fascinating. Don't miss it.

Thanks for listening to this episode. This is Carly, this isn't producer. To close, we at Beyond the Forum want to take time to say thanks to all the folks who helped us get this episode together.

Our first thanks goes to our guest, Tyler Vanderweel. We really, really enjoyed learning about your incredible research and how you're working towards more flourishing for all of us. We also want to thank our amazing production team at PRX.

That's Jocelyn Gonzalez, Genevieve Sponseler, Morgan Flannery, and Jason Saldana. And thanks to our great colleagues at the Veritas Forum for being our biggest fans and a fantastic team to work with. And of course, we want to thank the John Templeton Foundation and all of our donors for their generous support of our conversation.

And a final thanks goes out to our launch team and co-sponsors. It's so great to have your support and help as we produce these shows. That's all for this episode.

Thanks for listening to Beyond the Forum.

[Music]