



## Opinion Science Podcast

*Hosted by Andy Luttrell*

### Episode #14: Certainty with Zak Tormala

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#### **Andy Luttrell:**

About 10 years ago, neurologist Robert Burton wrote an article for Salon called The Certainty Epidemic. He writes, “Certainty is everywhere. Legions of authorities cloaked in total conviction tell us why we should invade country X, ban ‘The Adventures of Huckleberry Finn’ in schools, and eat stewed tomatoes. A public change of mind,” he says, “is national news.” And this isn’t anything new. I dug into the New York Times and found this gem from 1919, where a journalist writes, “Many of the people who go to community forums must be like many of the people who don’t go to them. That is, they love to be certain without taking the trouble to find out what a controversy is about.”

So, what is this sense of certainty that pervades people’s thinking? Where does it come from? And why does it matter? You’re listening to Opinion Science, the show about our opinions, where they come from, and how they change. I’m Andy Luttrell, and this week I talk to Zak Tormala. He’s a professor of behavioral science and marketing at Stanford University’s business school, and he studies how certain people are about their opinions.

A quick note about some terminology that come up in our conversation. In psychology, certainty has often been studied in the context of something called attitude strength. You can think of attitudes as basically synonymous with opinions, and lots of researchers have been interested in what makes attitudes strong. Certainty is one pretty reliable indicator of a strong opinion, but so are things like how conflicted you feel about an issue, how important something is to you, whether you know a lot about it, et cetera. But today, I talk to Zak about his research on certainty, including the connection between certainty and people’s willingness to become persuaders, and how you can use research on certainty to become a more effective persuader yourself.

#### **Andy Luttrell:**

I have a list of just sort of ideas of what we could talk about for the stuff that you’ve done, but I’m happy to kind of roll wherever this goes.

#### **Zak Tormala:**

Yeah, I’m happy to wing it. I have no agenda. I didn’t think through any talking points in relation to the couple topics you gave me, so it’s all freestyle here.

**Andy Luttrell:**

It's funny, so I've started putting talking points in because a handful of people asked for them, to be like, "Please give me something to think about before I came on."

**Zak Tormala:**

Yeah, yeah.

**Andy Luttrell:**

So, there's definitely two types of people. There are the people who are like, "I need to know what we're getting into." And then folks like you who are like, "Whatever. Let's just kind of roll with it." And I'm happy with either.

**Zak Tormala:**

Maybe at the end we'll both wish I had taken the other approach.

**Andy Luttrell:**

So, I thought one place to start would be just to get what you think certainty is. If you're talking to people about what it means to be confident in an opinion, what does that actually mean?

**Zak Tormala:**

Good questions. We normally think about certainty as being basically a person's subjective sense of conviction. I would have said confidence and conviction, but you used confidence in your question, so I can't-

**Andy Luttrell:**

Yeah, I used two of the synonyms.

**Zak Tormala:**

... use that word right back at you. But a person's subjective feeling of conviction about their attitude or belief on some topic. That's how I think about it broadly, and how my co-authors and I tend to define it when we're writing about certainty. And in some of our work, we've looked at specific types of certainty, or kind of trying to get a sense of where that feeling of confidence or conviction can come from, and there are probably others, but the two main ones that we've identified in our work are a feeling of correctness and a feeling of clarity. So, that could mean you're certain that your attitude is the correct one to hold and other people should agree with you, or on the clarity side, it could mean that you're really certain that that's truly what you feel, or what you think. Other people may agree or disagree, and that's fine. I know where I stand.

And so, you could have a feeling of correctness or a feeling of clarity, and they can both, either or both can kind of build up to a general sense of confidence and conviction, and that's kind of the basic structure of certainty in terms of the way I think about it.

**Andy Luttrell:**

So, if someone says, "I'm sure that I like this thing." It could mean some combination of, "I'm sure that it is correct to like this thing," and also, "I'm sure that this is where I'm coming at it from." Right? That's what you're saying?

**Zak Tormala:**

Right. Or just one of them. You could have just one. I guess it would be hard, is probably hard to feel correct without feeling clear, although you might think, “I’m certain this is the correct position. I’m not so certain I’m there yet.” You know, somebody could have a feeling like that. But I think of these as being kind of varying degrees of either or both that could lead to a general feeling of certainty.

**Andy Luttrell:**

Yeah. I was gonna ask whether both of those need to, or what the relationship between those is. I guess you’re saying we just don’t know. If all they said is, “I’m sure,” we still don’t exactly know what version of sure they’re saying.

**Zak Tormala:**

I think that’s true. We don’t know. If you look at research in this area over the past few decades, people have been studying certainty and asking questions like how sure are you, how certain are you, and so on. The definition they’ve often used to go along with that is more consistent with the correctness side. You know, how certain are you that your position is valid, or something along those lines. I think if you really go back and look at some of the early definitions of certainty, correctness is in there. You know, so I think researchers have thought about it more often than not in terms of correctness. In our data, it hasn’t been something we’ve commented on in order to make a sort of definitive take on this. But what we often see is that the clarity assessment better predicts global feelings of certainty.

So, researchers tend to kind of lean toward or prioritize the correctness side. Laypeople might be thinking a little bit more in terms of clarity. But ultimately, it’s sort of both, and maybe clarity is a better predictor because it comes first for a lot of people a lot of the time, or something like that.

**Andy Luttrell:**

It makes me think about when you’re talking with someone and they, like you said, they’ll say, “I’m sure,” or, “I’m confident that this is the way to think,” or, “I’m sure my opinion is X.” It might seem like what they’re saying is, “I’m telling you that this is the right answer.” But what they mean might actually be, “Oh no, this just happens to be where I stand, and I know I stand here, but I’m not about to tell you what to think.”

**Zak Tormala:**

Yeah. I think, and especially the way you just set that up, I’m sure my opinion is X or whatever you said, that feels more like a clarity type statement. I’m sure I know where I stand. I’m sure I’m against this. Or I’m sure I’m in favor of this. But you could probably sort of decode the other contextual clues. If they’re saying something like, “This is right. I’m certain of it.” Now they’re talking about correctness. So, it’s probably going to be looking at the other language around the claim of being sure, or feeling certain, that’ll tip you off a little bit as to where they’re coming from or what side is really driving it.

**Andy Luttrell:**

So, what ultimately matters about certainty? So, say we have two people, both of whom say, “I’m a Biden supporter in this upcoming election.” One of whom says, “I’m sure I’m a Biden supporter.” The other of whom says, “Oh yeah, I like the guy, but that’s the far as it goes. I’m not gonna say I’m sure quite yet.” Ultimately, why would we care that those people, even if they have the same position, are different in how sure they are?

**Zak Tormala:**

Yeah, so the importance of certainty and other facets of attitude strength is that it helps predict what a person’s gonna do in the future. It helps predict whether that person will be stable over time, whether they’ll resist attempts to change their views, and that sort of thing. So, in general, if you take two people who are equally pro-Biden on some attitude scale, one of them has a lot of certainty about it. The other one maybe lacks certainty or is somewhere below maxed out in certainty. The person who likes Biden with certainty will have a more consistent attitude. So, if you measure them again a month later, or two months later, you’re more likely to see the same attitude in that person if they had a lot of certainty at time one.

Likewise, that person is more likely to resist pro-Trump ads. They’re more likely to show up and vote, and then to vote in line with their stated position, which can be a major problem for predicting election outcomes. Late deciders who flip at the very end and so on. And they’re also more likely to advocate and take other action to sort of express their view or try to persuade other people to get on board, maybe more likely to have bumper stickers on their car, signs in their yard, to share their views with their friends and family and that sort of thing.

So, the exact same position on a scale, like being six out of seven pro-Biden, something like that, if that six is held with certainty, it leads to all that sort of stuff I’m talking about. And if it’s held with less certainty, it has less of those downstream consequences.

**Andy Luttrell:**

The stuff about putting a bumper sticker on your car and going out and trying to rally other voters, that seems to me like direction that you’ve headed in a lot more over the last several years, to look at that advocacy stuff. So, I was just kind of curious to get your take on why now, why is that capturing your interest these days?

**Zak Tormala:**

Just yeah, you mean my own personal research journey?

**Andy Luttrell:**

Yes. Your journey.

**Zak Tormala:**

Well, that’s a good question. I mean, I can tell you why I think advocacy is interesting and important right now, which doesn’t necessarily answer the question of how I got into it, maybe just because I don’t have a very clear origin story around that. But-

**Andy Luttrell:**

I feel like this question, every time it's like, "How did you get interested in this?" It's always looking back and making up a story about it, right? So, let's all accept it, and let's just hear what the story you're coming up with now is for why this is interesting.

**Zak Tormala:**

Yeah. Good question. So, the reason I think it matters right now is that in this day and age, I think people have more opportunities than ever before to express their views and try to persuade other people, so to advocate on behalf of their own beliefs and opinions. So, people have always had opportunities to do that sort of in a face-to-face word of mouth fashion, or by writing editorials for newspapers, or things like that, putting signs in their yards. But with the rise and proliferation of social media, these opportunities are just expanding all the time. So, marketers have gotten a lot more interested in sort of consumer-to-consumer advocacy. I think in political science, it's also become more and more important, looking at belief transmission.

And so, I think in this era that we're all living in, people have increased communication opportunities, and they're expressing their views more and more. And so, just understanding the factors that lead people to want to do that, the factors that predict the impact of doing so, it's just becoming increasingly important as more and more people are doing it. So, I think it's an important topic, and it's becoming more important all the time.

One of the reasons I got into it, to backpedal a little bit to that, is just that it seemed like an overlooked thing in our field. So, a lot of persuasion research over the years had looked at the factors that predict how successful a given message is, or had started to look at the factors that make people feel certain, or knowledgeable, or that their attitude is important, so the things that lead to attitude strength. But there still was very little attention given on what leads people to try to persuade others, so taking the perspective of the persuader rather than the recipient. You know, what leads people to speak up, stand up for their views, express them to others and try to persuade other people is just something that had been overlooked, and so it seemed like a natural blind spot in the literature that we just didn't know much about that, even though it seems like an important part of the experience of having attitudes, is representing them, speaking on their behalf, trying to get other people to share them and so on. And our science had little to say about the factors that really trigger that.

**Andy Luttrell:**

Did it always seem like certainty was part of that puzzle? Hindsight is what it is, and it kind of feels like, "Well, yeah. The people who are the most confident should be the people who are gonna try to shape other people's views." Did that seem like a foregone conclusion at the time? Or is that kind of an open question, then?

**Zak Tormala:**

It seemed highly likely, I'll say that. So, I don't think... I mean, for me, looking at certainty as a contributor to advocacy was a really natural steppingstone, if you will, because I was already doing a lot of research on attitude certainty. So, I was already interested in certainty, and then once I started getting interested in advocacy, it made sense to marry these and try to look at the relationship between them. It did seem highly likely. Foregone conclusion, I don't know if I would

go that far, but it seemed highly likely that the more certain people felt about their attitudes, the more likely they would be to advocate on behalf of them. And there is some evidence for that in past work.

So, if you look at early attitude strength research in the early '90s, for instance, you could see evidence of attitude strength dimensions, including certainty, predicting things like a person's willingness to talk about their point of views, which is basically an advocacy type question. So, there was evidence, and intuitively it felt right, and so yeah, I think the work I was doing on that, the natural prediction to make was that more certainty would lead to more advocacy. And our early research bore that out, and then later research as we kept going painted this slightly more complicated picture.

**Andy Luttrell:**

Which is what? So, that's one of the things I was maybe needling you to think about, which is that in some cases you find that increasing uncertainty is related to advocacy. So, why? I guess the question's two fold. Why is it really that certainty is associated with sharing your opinion, and also, why would it be that uncertainty would similarly be associated with wanting to share your opinion?

**Zak Tormala:**

Yeah, good question. I mean, so I think there are a couple things to note here, and one is that in our work, at least, uncertainty doesn't lead to more sharing and advocacy than certainty. But really low certainty, so like a clear uncertainty, leads to more sharing and advocacy than moderate certainty. So, in our work, there still is a generally increasing trend that the more certain you get, the more likely you are to advocate, especially as you go beyond moderate toward very certain, but moving from moderate to very uncertain, so at the very low end, you see this slight uptick, where people start to become more likely to advocate when they're really uncertain compared to somewhere in the middle.

So, in general, I still think it is a safe bet that there's still an upward trend overall as you go up the scale. The reasons certainty leads to advocacy I think are pretty easy to just sort of guess at. The more... We talked earlier about clarity and correctness, and the more clear your view is in your head, the more correct you believe it is gonna be, it is, the more likely you are to share it, express it, try to persuade other people. It would be weird to try to persuade somebody on something that you weren't so sure about. But people who are extremely certain seem to advocate to reduce uncertainty. You know, maybe to gather information, or prompt other people to share their views. So, if I'm really not sure about where I stand, so let's say I like Biden, to go back to your example, but I'm really racked with doubt about that, I might be fishing for information from you, so I might say something like, "I really like Biden. I think he's got a good chance. Blah, blah, blah." And then that's an invitation for you to speak up and now I can learn from what you know, and so I think sometimes when people who are uncertain are advocating, they're actually information seeking. They're expressing a point of view, but trying to reduce uncertainty and gather more information as a part of that process.

So, our data, again, kind of in a preliminary way, sort of pointed toward some sort of information seeking uncertainty resolution kind of motive that might underlie that, and I know there have been

other findings in the literature that look like that, too, where it seems to be maybe more about dissonance reduction, or compensatory motivations, where I'm really uncertain, but I expressed my view because I want to pretend I'm certain or convince you that... I'm compensating for something. We didn't see a lot of evidence for that in our data, but I know some other labs have found something that looks a little bit more compensatory in nature.

**Andy Luttrell:**

So, if I'm to draw some lines in your career, again, maybe some looking back storytelling, right? So, this is stuff about how certainty is related to persuasion in one sense, where the more certain people are, the more willing they are to go out and try to convince other people. But I feel like some of your earliest work is looking at sort of a different side of that coin, which is how certainty can result from reactions to the persuasion process, resistance in particular. So, could you kind of summarize what is it about certainty that can result from a persuasion process?

**Zak Tormala:**

Okay, so yes, so we're going way back now.

**Andy Luttrell:**

Way back.

**Zak Tormala:**

This is all the way to my dissertation research. And actually, that's the research that got me interested in certainty in the first place, so I can give a brief backstory there, but it was in grad school. I started getting interested in the kind of hidden, undetected effects of persuasive messages that seemed to have had no impact, you know? And so, when a persuasive message appears to have failed, because it didn't change the person's attitude, what else might have happened? What's lurking underneath the hood if you opened it up? And so, early on we were looking at a lot of different possibilities, and then one consistent finding was that certainty could vary in those situations.

And so, what we were finding back then was that when people try to persuade us, let's say that you're trying to persuade me. Let's go back to the Biden scenario. And so, you're working on the Biden campaign. I'm a perspective voter. And I'm in this scenario, I don't like this example already that I'm using, but let's say I'm anti-Biden in this scenario, and so you're trying to persuade me to support Biden, and I resist your message. So, I counterargue you and I'm not convinced by your message. What we were finding is that although my attitude didn't change, so maybe I was moderately against and I'm still moderately against, for example, I might feel more certain of my view than I did to begin with, because not only did I not change, but I successfully counterargued you, and so I might feel like using kind of attributional reasoning, that my attitude didn't change because I counterargued an attack on it, so I must be right, and so I get a boost to certainty. Or maybe it was I really must know where I stand, to think about the clarity interpretation. We weren't thinking about those variables back then, but successfully counterarguing and resisting a message could produce a bump or a lift in attitude certainty.

In follow-up work, we got a little more nuanced, and tried to identify when maybe certainty might be shaken following a resistance experience, so I tried to resist you and I did, but I struggled. It

was hard. You had some good points and I struggled to come up with compelling counterarguments, or something like that, that people could have attributions that lead them to question their views. I didn't move yet, but I have to admit, that was difficult. I almost gave in there. Maybe I'm not so confident anymore. And so, although my attitude stayed the same, maybe on that seven point scale we were talking about earlier, it was a two and it's still a two, but in one case, I could become more confident that that two is right, or in another case I might become less confident, based on my resistance experience.

**Andy Luttrell:**

So, the way of thinking about why that is is to go like... People are reflecting on how able they were to hold onto their opinion when there was pressure to change it, right? And so, people might think this was... I was able to hang onto my opinion even though this really smart person had lots of reasons why I shouldn't think what I think. I was able to still hold my opinion, therefore I feel pretty sure about where I am. And so, the question that I always have about this is how conscious is that part of it? Does it require people to actually realize, like face to face, go, "Ah, wow. How wonderful that I was able to hang onto this opinion. I guess now that I think about it, this means I'm really sure."

**Zak Tormala:**

Yeah.

**Andy Luttrell:**

Versus just sort of a natural outcome of resistance is to bolster confidence.

**Zak Tormala:**

Yeah. Good question, and it's always hard to have really concrete evidence to rule consciousness in or out, because the attempt to measure it can increase it and so on. So, with that caveat in mind, our evidence pointed to it being a more conscious process, and so one example is that in some of the studies on that topic, we found that it's the people who are really thinking a lot, who seem to show this effect. Another sort of potential bit of evidence is that in some of that research, we just asked them questions, like how successful were you at defending your view just now? Or how strong do you think your counterarguments against that attack were? And people reported what you would predict they would report, based on the notion that they were consciously tracking it.

So, if the person in question had just resisted an expert, for instance, or had just resisted arguments that they were told were really strong arguments, they rated their own success at counterarguing as higher than if the arguments were from a non-expert, for instance, or if the arguments that had been labeled as weak in some way or another. So, people did seem to register that, "I did a good job," and then that statistically mediated our certainty effects that we were talking about before. The thing we could never be sure about is maybe it was asking that prompted them to reflect and it wouldn't have happened spontaneously, so it's never 100% locked down, but evidence seemed to point toward it being a kind of conscious metacognitive process, where people are reflecting on their attitudes, and their thoughts, and how confident or certain they should be about them based on what's happening in the situation.

**Andy Luttrell:**

It comes to mind because whenever I teach these kinds of super complicated metacognitive approaches to things, you explain it as though people are deliberating and having this conversation in their head, and then I always go, “I just spelled out a minute and a half long conversation people are having with themselves, but are they actually having that conversation?” Or is it... And you’re right. I don’t know how we would know.

**Zak Tormala:**

I think if I remember correctly, it’s been a while since I read my papers on that, just because I think the first one was 2002, so it’s been a bit. But I think in the text of those articles, we have examples of the thought process people are engaging in, where it’s sort of like, “I just resisted that message and the argument seemed really strong. I really must be right, so I should be certain about this attitude.” Which is sort of like the logic that we think is unfolding at some level, and the way that we talked about it by trying to help readers understand what we meant makes it sound like it’s this minute and a half long internal conversation, like you just said. And in reality, these might be split-second feelings that arise, but they seem to map onto that kind of a conscious process, and it’s really hard to be sure.

But the fact that high need for cognition individuals seem to show these effects and lows don’t, and that cognitive load can kind of undermine these effects, it seems to be consistent with the idea that it is a thoughtful reflection at some level. Whether it’s a minute and a half or two seconds, I’m not-

**Andy Luttrell:**

Right.

**Zak Tormala:**

Maybe closer to two seconds.

**Andy Luttrell:**

I don’t know if I’ve told you about this, but whenever I think about that work that you’ve done, it reminds me of this thing that I thought was super bizarre that someone did in college. I remember I was in a stats class in college, and the person who sat next to me, she told me that she was on a diet, and she would go buy a candy bar from the vending machine every day, and she would set it on her desk in front of her, and then not eat it for the whole time that she was in class, and then throw it away. And I was like, “That is crazy. Why would you do that?” And she was like, “It is a reminder to me that I’m committed to this diet and that I can withstand the temptation that these things hold for me.” I mean, these are words I’m using now to describe what I think she said at the time, and I was like, “But you’re wasting money.” It didn’t compute for me, and then I read your stuff and I was like, “Well, that might actually have had something going for it.” Right? To say, “I’m internalizing from my resistance to temptation my commitment to a goal.”

So, I always wonder how far you could push that idea, that people feel confidence from being able to resist other ideas or other temptations.

**Zak Tormala:**

Yeah, I mean that side of it does seem a little bit like what our research would predict. The fact that she was approaching temptation to begin with is a little different than we were looking at, but it reminds me of Dolores Albarracín's work on defensive confidence, where people who already have some confidence that I can resist, or win this challenge, or resist a threat or a challenge on my view might be more likely to approach those scenarios. And so, maybe the person, your classmate, already had enough confidence to feel like she would survive that challenge, and then it would further boost her confidence, so it's maybe a little bit of that defensive confidence idea, paired with a little bit of the resistance stuff that we did. It's a little mashup.

**Andy Luttrell:**

Got it. So, are there insights? So, you teach business students about persuasion and opinions, and so I'm curious how you balance the... I mean, you're bread and butter social psychology trained, look at the science, and my impression is that people who want to use persuasion strategies just want the special sauce, and I'm glad that it's tested, but I just want to know what the tactics are, so I guess I sort of am going two places with this. One is are there insights we can gain from the certainty research that you've done, and other people have done that are applicable in an actual persuasion communication orientation? And then also, how do you balance those competing motives to be true to what we know is accurate from the research, and to have a healthy dose of skepticism that even if a couple studies show something, doesn't mean we understand the full picture with the need to give a nice, clean version of the story to people who want to use it?

**Zak Tormala:**

Yeah. Well, first of all, I would like to push back on your stereotype of business students, that they are not interested in research. I think there's some truth there that practitioners are more interested in the application and give me the toolkit and let me use it, but I think a lot of them in my experience, I teach MBA students and executives, they also really value the fact that this is evidence-based stuff, and that it's empirically derived. And so, I always make sure that I tell them up front, the only thing I'm talking to you about is evidence based. This is all based on research I did or other people like me at other universities did, and what we're gonna do is talk about what the evidence shows, so what's the theory, what does the evidence look like, and I'll discuss a sample experiment, for instance, and then let's get together and brainstorm possible applications.

And so, I frame it like that and find that people are interested in that angle, and understand that nothing's guaranteed in life and in persuasion, and that what we're doing when we teach it to practitioners is giving them the best advice we can give them based on the data we have. It's that what I'm trying to teach you about things that most of the time will serve you well, but not always, and it will depend on your specific implementation of it. I just wanted to preach on that for half a second.

**Andy Luttrell:**

I accept the lesson. Thank you.

**Zak Tormala:**

But yeah, but there are takeaways. I mean, so I do talk about certainty in my teaching with executives and MBAs. And in fact, it's one of my favorite things to talk about, because I think it's

a layer of persuasion that people don't naturally think about on the practice side. And I approach it from two perspectives, and one is what can we learn from this research on attitude certainty that might be useful to you as a practitioner, and the other is looking at the flip side, what have we learned about when uncertainty has advantages, and what are those advantages and how can you use that as a practitioner?

So, attitude certainty is hugely important. We both, here in this conversation, understand that. But I try to usually sell it first, so using the Biden type example that you were bringing up, two people who are both a six are very different people if one of them has a lot of certainty and one of them doesn't. The person who's certain is more likely to vote, more likely to advocate, all those things that we care about. So, as practitioners, you should care about this stuff. You know, is this a high-impact six or a low-impact six? And that's an important thing that they're probably often overlooking before they start thinking about this.

And then the lesson, for me, is that the attitude certainty research uncovers or sort of opens up a number of persuasion tools that you can use when your audience is already leaning in your direction. So, let's say that your audience, people often think about persuasion as what you do to convince people to share your view, but often that's not the problem. Often the problem is that even though your audience is already on board, so they like your idea, or your product, or your candidate, or whatever, they're with you, but they're still not taking action, they're still not voting, or buying, or spending, or recommending and advocating and so on. You can increase their certainty and that's gonna give you meaningful traction or meaningful lift as a persuader.

And then what are the tactics for increasing people's certainty? And here I talk about a little bit about defense, which is what you were asking me about with resistance, so getting people to defend their views. So, if I'm pro-Biden, you're pro-Biden, but I'm worried about your certainty not being high enough that you'll go out and vote, maybe I should push back on your view and get you to counterargue my point. So, you know, "Well, a skeptic would say XYZ." Or you know, "People on the other side disagree. They would say A, B and C. What do you think about that?" And I get you to engage in a defense of your own view. So, rather than giving you the ammunition, I get you to become a defender of the position, and then based on our research, there's reason to believe that can increase your certainty, at least a bit.

I also talk about consensus feedback, so if somebody is on board already, let them know that other people share that view. So, once, let's say that I'm working for the Biden campaign, and I send you, a registered Democrat hypothetically, a survey. In that survey, I ask you about your attitude toward Joe Biden and you say that you're a six, because six is gonna be all of our examples today. So, you're a six. Maybe my survey has an algorithm so that if you're above the midpoint on my scale, it's gonna give you immediate consensus feedback, so you said you're a six, so it's gonna say, "Good news! 89% of our sample agrees with you." Or maybe you say 25,000 and counting voters share your view who we've surveyed already. Or you know, you can think about exactly how you want to frame your feedback.

But when you know people are on board, give them high consensus feedback. People agree with you. We hear that a lot. Another client yesterday just told me the same thing. This kind of social validation, and that when people have the desired position, we validate them socially, we can

increase their feeling of certainty. So, consensus, getting people to defend their view, maybe in that same survey that I was just talking about, after you say you're a six, you get a popup box that says something like, "What would you say to somebody to somebody who disagrees with you?" And then you say, "Well, I would say..." And you're typing in a response that's now elaborating on and defending your view, which is kind of triggering that resistance defense type mechanism.

These are speculative approaches to apply, but so I think there are real practical takeaways. And then, you know, and I talk when I'm teaching these audiences, we go beyond those, too. But those... That gives you a little bit of the flavor. But the central point is that when people are already with you, they are still viable targets of persuasion, but your persuasion strategy needs to focus on building their certainty.

**Andy Luttrell:**

On the persuasion angle, I wondered. I mean, I've heard rumblings of another version of this, where casting doubt in the other side of things could be a viable persuasion strategy, so maybe at the moment, there's just no world where I'm gonna get you to agree with me. But maybe I could get you to start wondering whether you're really right about where you stand right now. And it kind of reminds me, I know like the tobacco industry famously... Their tactic wasn't to say cigarettes are actually healthy. Instead, it was to basically undermine the validity of the research that was saying that it was unhealthy.

**Zak Tormala:**

Yeah. I think climate change, we've seen similar stuff there, where a big argument on the opposite side is just that there isn't consensus yet on this, and that's a way to... I mean, that's an empirically documented way to produce lower certainty, is by showing that there's a lack of consensus around a view. So, I do think there is a likely effect to be seen there. I generally don't recommend it when I'm teaching on this stuff, and I think partly because in general, I think that we see more reliable action that high consensus increases certainty more than low consensus decreases it. And again, this is also really tentative, because I don't have a lot of evidence that allows me to even, or a lot of studies or data that allowed me to even look at this. But when I have, it looks a little bit more like you getting a boost from high consensus, more than a drop from low consensus. That often looks more like baseline certainty.

So, we're not seeing, for example, in our studies on consensus, that the low consensus condition is like a two on a nine point certainty scale. They're still like a six or something. We're not getting them catastrophic blows to their feelings of certainty. And so, the action seems to be a little more reliable in the other direction. But then the other issue is I think you just risk being perceived as an asshole if you do that kind of stuff, you know? That imagine like a sales context or something, and I'm pitching you, and you say, "I don't know if this will be good for what we're working on." And I say stuff like, "Geez, nobody else has said that." Then I just seem like a jerk or whatever. I'm trying to tell you you're wrong, and if it looks like you're trying to tell somebody they're wrong, that's a pretty reliable way to predict your attempt will backfire. You'll alienate them, make them angry, and if anything, they'll double down.

So, I generally don't advocate using the sort of low certainty side of our findings to actively undermine certainty as much as focusing on the other side, which seems to be a little safer and a

little more reliable for different reasons. Where I do talk about uncertainty is where you can create moments of uncertainty to get people more engaged in your message. So, we know that uncertainty is a very reliable trigger of information processing. You know, the more uncertain people feel, the more deeply they think about something. So, if you can create little moments of uncertainty, for example early in a message, you might increase people's involvement and interest in processing and that can enhance your message impact. So, if you think about it as a way to build engagement, that's where I advocate using some of the uncertainty findings.

**Andy Luttrell:**

And it won't be a jerk move to do that.

**Zak Tormala:**

It wouldn't be a jerk move. So, I focus on a different class of findings, basically. So, in some other program of research... Well, program is... It's not all related to each other. But I have another sort of loosely-connected stream of research, looking at how there can be an upside to uncertainty in persuasive messaging. For example, if you are perceived to be high status or to be an expert in some domain, you acknowledging your own uncertainty can create a moment of uncertainty in your audience that's unexpected and makes them curious and they tune in and think more about what you have to say. So, that's like a basic expectancy violation.

**Andy Luttrell:**

It's more situational uncertainty than it is like, "I might be wrong."

**Zak Tormala:**

That's right.

**Andy Luttrell:**

It's more like, "Something is off here."

**Zak Tormala:**

Yeah. It's something more akin to situational uncertainty, or moments of curiosity might be another way to frame that, that if you're a known expert in an area and you express that you're uncertain, it's hard to be 100% sure, but here's my point of view. That that creates a moment of uncertainty in the audience that tunes them in. Now I really want to hear what you're gonna say. I perk up and get more interested. So, it's situational, and it's like, "What's happening? This just deviated from the expected course." And we have a handful of projects or papers on this topic with that kind of situational uncertainty, where like making a claim about somebody's high potential can be more impactful than making a claim about somebody's high achievement. Potential has a lot that's different from achievement, but one of those things is that by definition, it's kind of uncertain. If you have high potential as a leader, you might be a great leader, or you might not. We'll see. You have high potential, but you haven't realized it yet.

If you're a high accomplishment leader, you've done it. You're already doing it. That's in fact very certain. And so, similarly we've seen that people think more following a person's claim about high potential than they do following a person's claim about high achievement. And we have a handful of other findings that look at uncertainty a little bit more like that. Using a pause or an

interruption in a message might be another way to do it. I've got some research showing that when a message is interrupted just momentarily, people get more curious about what was coming, and then that can get them to basically think more deeply once the message continues. Basically, if I'm making a claim about the importance of pauses, just to make this completely meta, I might say something like, "Pauses can give you a lot more persuasive impact. When you pause your message... it makes people wonder what you were gonna say." And then they go on and on, and so again, that's not really how we tested it, but that's how I think about pauses. They can create a moment of uncertainty in the audience where they're thinking, "Wait, what was coming? What was he about to say?" And then when you continue, they're more engaged, and then they want the information. They want to know where you were going and wanting information and then getting it is very different from just getting it.

**Andy Luttrell:**

The last thing that I was gonna ask was just to kind of pull all the pieces together, there are all sorts of things about opinions that are related to the stuff that you said makes certainty compelling, meaning there are lots of reasons why someone might be resistant to some other idea, or turn their opinion into an action, but it does seem... I mean, I hate to break it to you. You're not the only person who studies certainty. It's studied by... I know. I knew that this was gonna be where this interview goes off the rails. But it's one of those attributes of opinions that has been really widely studied. I'm just curious if you've thought at all about why certainty. What is it about this one that is either just captivating to researchers or is actually unto itself especially important?

**Zak Tormala:**

Yeah, I think it's probably twofold. So, why it might be especially important, I think people... It's something that everybody has experience with, feeling certain or uncertain. I think in general, people have a quest for certainty at some varying degree of consciousness, or some varying degree of how primary it is as a motive or drive for an individual. But people want certainty, so I think there's something about the pursuit of certainty and the effects of it and uncertainty on the flip side that is just powerfully relatable. That people kind of... They know what it's like to feel that, and it's potentially at least a fundamental human drive. So, that might be one factor in why researchers have also studied it more than other properties or other dimensions of attitude strength, for instance.

But I think it's also probably that research begets research, and the more people who are working on something, like maybe there's a brief surge in research on something like certainty, and then every time you learn something, new questions arise and not just in the person who did the research, but in readers of the research and so on. So, I think sometimes areas take off. This is circular reasoning, but areas take off in psychology simply because they're taking off in psychology. And so, you know, if you and I let's say are both studying certainty, maybe we're working on a paper, we produce, we have some finding, then somebody else reads that paper and then they have an interest, a question that's interesting to them about that research, so now they're studying it. And so, the more people that start studying something, the more momentum develops, and that probably plays a role, as well. But at some point, there is just a surge in research on certainty, and then that surge leads to longer-term interest from others, as well.

**Andy Luttrell:**

My pet theory about certainty in particular is that scientists are used to uncertainty, and are used to going, “Well, we don’t ever have a firm idea of what’s going on.” And then we see people who seem to be sure, and we go, “What? What’s making these people so sure? What is it doing for them?” And that could inspire the question. So, my undergrad research methods project had certainty as part of it. And out of nowhere. But because I had that same kind of orientation, where it was just like, “Well, why? Where are all these people getting this confidence from? How is everyone feeling that they know what to think about all these issues? And so, I kind of wonder if that is at the core, and I’m curious to get your take on this, if this has anything to do with your interest in it over time also.

**Zak Tormala:**

Yeah. I don’t know. I mean, your take makes sense to me. That resonates, that it could be scientists are... Yeah. Dispositionally uncertain, and that’s probably a big part of becoming a scientist, and the interests in the scientific method as a way to try and reduce uncertainty, but then the more information and insight you get, the more uncertainty sometimes you end up with, because it raises new questions. But I could see that scientists might be uniquely uncertain in some ways, and so grappling with how do people feel certain, and why, and what does it do, would be especially interesting to them, so that makes sense to me.

In my case, I don’t know. I think I am characteristically uncertain, like I tend to have a lot of ambivalence and a lot of uncertainty around big decisions. So, I’ve never... I should talk to a therapist and do a deep dive and try to get insight into this, but-

**Andy Luttrell:**

Just read one of your papers.

**Zak Tormala:**

Yeah. It’s possible that did play a role in it for me, that it was not... That was not a conscious part of my... I don’t ever remember thinking about it like that, but it certainly is possible that because I’m sort of chronically uncertain, that I naturally gravitated toward certainty. I mean, my subjective experience, or I can say my recall, which is distorted by time and all kinds of other factors, is that early on, when I was doing the resistance research, we were measuring lots of different sort of forms and dimensions of strength, and certainty was showing the most reliable effects. And then I started looking around and got us some sense that maybe certainty was a little more consistent in the effects it produced compared to other dimensions of strength. At least looking back now, 20 years later or whatever, that’s the version I recall, was that it was data driven, that this seemed to be the reliable variable that was moving and had a lot of impact, and so it had made sense to study that one, rather than something that was harder to replicate and a little bit more flimsy or fleeting, you know?

But I don’t know. That’s how I remember it now.

**Andy Luttrell:**

Well, it got you this far.

**Zak Tormala:**

Yeah. Right. Whether it's the real story or not. But I do think, though, that unlike some other dimensions of strength, that certainty findings, at least in my personal experience as a researcher, have been more consistent and more reliable, compared to some of the other dimensions of strength that we've tried to look at. But that's just anecdotally, based on my own personal experience measuring different forms of strength. People who've studied the other ones probably disagree and have the opposite take.

**Andy Luttrell:**

Well, I will take your anecdotes as fact, so-

**Zak Tormala:**

Yeah. That was the goal.

**Andy Luttrell:**

Good. Well, Zak, thanks so much for talking about the stuff that you've done on certainty. I'll keep an eye out for what to learn next.

**Zak Tormala:**

Thanks a lot. Thanks for having me on the podcast. I appreciate it.

**Andy Luttrell:**

All right, that'll do it for this episode of Opinion Science. Thank you so much to Dr. Tormala for sharing the work he's been doing. Check out the show notes for a link to his Stanford webpage and for more information on some of the research that he talked about. You'll also find a link to a full transcript of this episode. For more about this show, head on over to [OpinionSciencePodcast.com](http://OpinionSciencePodcast.com) or follow us on Facebook or Twitter @OpinionSciPod. I'm on Instagram, too, but frankly, I don't know how to use it.

And thanks to everyone who's rated the show and left a review online. One listener wrote recently, "Great podcast with interesting guests and topics. I'll definitely keep listening." Did you hear that? That was very nice. If you're also interested in being a nice person, [pause] I'd love it if you headed on over to Apple Podcasts and left a nice review, too. See? I used the pausing trick that Zak shared. Did it work? We'll find out. Okay, that's it for this week. Thanks for listening and come back next time for more Opinion Science. Bye-bye.