Opinion Science Podcast

Hosted by Andy Luttrell

Episode #2: Good vs. Bad with Jehan Sparks

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Andy Luttrell: [00:00:00]
So many of the stories that catch our attention are about the struggle between good and evil. The oldest religions distinguished between good spirits and evil spirits. And these days we debate whether avocados have good fats or bad fats. IT's this simple fight between good and bad that's really at the heart of what opinions are.

For me to support my local food bank is for me to associate it with the concept of good. For me to hate my mortal enemy is for me to associate him--and he knows who he is--with the concept of bad. In fancy terms, we refer to positive or negative as the "valence" of your opinion. So what can seem like sophisticated opinions often boil down to this simple distinction between good versus bad, like versus dislike, support versus oppose.

Like consider my cat. It might seem a little weird to say that she has opinions, but there are things she likes and things she dislikes. I mean, she sure loves food. She screams at me louder than a 10 pound furball ought to scream when it's time for dinner. And she definitely hates getting her nails clipped. Those are basically her opinions. Oh, and she didn't love season two of The Wire, it turns out.

You're listening to Opinion Science, the show about the science of our opinions, where they come from and how they change. I'm Andy Luttrell. And this week I talked to Jehan Sparks. She was recently a postdoctoral scholar at the University of Cologne, and soon she'll start a postdoctoral position at UCLA Anderson School of Management. Jehan studies valence, especially how positives versus negatives can carry different weight when we're figuring out what our opinion of something is. We'll talk about how valence can get messy and why people so easily get hung up in the negatives

(Interlude music.)

So I'm wondering if we could start by having you talk a little bit about what valence is, what people have talked about valence before, and what that bias in valence has tended to look like. And then we can go into the kind of work that you've done with this.

Jehan Sparks: [00:02:13]
Absolutely. Yeah. So we, have tended to talk about valence and study valence as, historically, at least as a dichotomy, really.

So something is positive or something is negative. Of course you, I know, work on ambivalence and yeah, a lot of other people have been talking about how that conceptualization is too simple, in many different research areas, but, I think if you were to try to categorize like, historically, and, and maybe just how everyday people think about valence, it would be a really straightforward thing of, you know, we can, distinguish between in almost every experience that we have as something that is good or bad, something that we like or dislike, you know, more or less, it's an easy way to categorize.

Andy Luttrell: [00:03:05]
So as we move through the world, we just kind of have these two bins, the good bin and the bad bin, and we're just putting our experiences into one or the other.

And that sort of summarizes how we think about our experiences

Jehan Sparks: [00:03:17]
Pretty much. And that's what tends to be a really useful simplification-- over simplification, but, yeah, it's probably helped us, you know, it's probably adaptive to think in that way. Of course it's oversimplified, but, you know, it gives us at least a starting point, and certainly been helpful for researchers in many different areas.

Economists think about, valence in that way. Even now a lot of times, some psychologists of course have, as you know, sort of made that much more nuanced, in many different areas. So cognitive psychology and of course, attitudes, researchers.

Andy Luttrell: [00:03:57]
You said that it's oversimplified it and kind of like, of course it's over simplified.

But has it always been such an obvious thing that that's too simple? There's sort of a, a part of that that feels pretty comfortable that yeah, there are good things in there, bad things. And why would it have to be more complicated than that?

Jehan Sparks: [00:04:15]
Yeah, I think that's a fair point. You know, I mean, yeah.

I think of myself as someone who's like generally ambivalent. Like, I, I, would say that if you, if you asked me, you know, do I like running? Yes, I, I like running, but of course, but you know, when I, when I sit down and think about it a little more deeply, I'm like, well, you know, I get injured a lot.

It's really hard too, and I keep trying to get fitter and you know that then my muscles get sore. And so I have really mixed feelings toward running and, and I wonder, you know, how my attitude toward running changes over time as I go through these different experiences. So that's a question, that I've been, I think a lot about as sort of how the order of different valances may influence our attitudes over time and how much our attitudes change.

Andy Luttrell: [00:05:13]
So I know you've done work on negativity, bias as sort of a general thing. So maybe you could talk about a little bit about what that is in general, and then you can get into the wrinkles that you've looked into.

Jehan Sparks: [00:05:23]
Yeah.

So negativity bias is a really, thought to be a really broad and general psychological phenomenon.

It's the idea that bad is stronger than good or that the psychological effect of bad or negative events tends to outweigh the psychological effect of good or positive events. And this has been shown in a really impressively wide variety of domains. In fact, it's been argued to be the, maybe the most general psychological principle out there.

So for example, we know that, people pay more attention to, negative than positive information. We know that people respond more to negative than positive emotions. People prioritize negative over positive information when they're forming impressions of other people, even at a neurological level, the brain responds more to negative stimuli than positive stimuli.

So. Yeah, there's this, you know, very, very general sense that, negatives outweigh positives, even, you know, when they're an equal number, when they're equally extreme, and, and there's this large literature about this. So a lot of my research studies negativity bias in a slightly different, sort of way.

So, the typical way that people have studied it is to look at one type of event or one attitude. And so they're looking at something that's negative and something that's positive and trying to equate those in terms of extremity or something. And showing that that negative thing still outweighs... has this stronger psychological impact than the positive thing and what my collaborators and I were sort of interested in is... okay, but people don't really just see one thing in everyday life. Right? We rarely see something like framed--we study framing--you know, framed just once, we tend to see things framed and reframed in different ways over time. So what happens when we see positives and negatives in sequence? Can people switch just as easily from positive to negative framing, for example, as from negative to positive framing?

Or do they tend to get stuck in one way of thinking and why might that be? And so we draw a lot on this large literature and theory and research about negativity bias to make predictions for this literature on framing.

Andy Luttrell: [00:07:54]
So to make this a little more concrete, let's just imagine that you're forming an impression of a person.

And it's usually not the case that you only learn one thing about a person. I mean, sometimes in our studies, that's exactly what we do. We're like, here's a guy named John. You're going to learn one thing about him, so buckle up and pay attention because this is all you're going to get about John. And then you form some impression.

But realistically, what happens is you meet a person, you learn all sorts of things about that person unfolding over time. And then you use kind of the, all of that information to form an impression. So what I'm hearing you say is that if the first thing I learned about John is unpleasant or something unsavory about him, then that's going to have... carry a lot of weight in my overall impression even if what I end up learning is positive stuff about John. Whereas if I

started out learning something positive, what is it that the new negative stuff I learned is then... what happens there?

Jehan Sparks: [00:08:53]
Yeah. So what we see in that case is actually that people's attitudes just follow along with the information or with the frame.

So if they first learned something positive about John, they'd feel pretty positive about him, they say I liked John quite a lot. If they then see something negative, pretty dramatically changed my mind, decide not so keen on John. But the other way around, attitudes aren't as flexible. If you see the negative thing first, you think John's probably not a great guy. I don't really like him. But if you see the positive thing then second, your attitude doesn't shift as much toward that positive frame or in the positive direction, suggesting that you tended to get stuck in that initial negative way of thinking about John. Yeah. And we have shown it actually in person perception, things like exactly like you're describing, but it's unpublished so far.

Andy Luttrell: [00:09:48]
You know, this also reminds me of consumer experiences, right? So you can imagine like going to a restaurant. If the first time you go to that restaurant, you have a great experience, you go, "Oh, this place is great." And then if you go back a second time and you have a negative experience, you go, "Oh, not so great.

But if your first experience is negative, well, number one, you may not go back there again. That's, that's probably the primary challenge, but let's say you do end up going back there. Someone forces you to go, and then you end up having a positive experience. You're still gonna approach it with that first unpleasant experience.

It's still gonna kind of haunt your final impression of it. Actually, I was just telling someone about this a little bit ago that I have a personal rule that if there's this place that everybody loves and I go, and I don't like it. I will always give it one more chance. Cause I don't know what exactly made it so horrible the first

Jehan Sparks: [00:10:40]
That's interesting. Yeah. That might be a good moderator to test. So we thought about like setting people's expectations or like yeah, maybe some outside influence could be... very, very cool idea.

Andy Luttrell: [00:10:54]
So what is it then about negative stuff that makes it so sticky? What is it about it that makes it loom so large?

Jehan Sparks: [00:11:01]
That's a great question and a really difficult question.

So I can summarize a few different potential answers that I've used in my work and that other researchers, have advanced too. So like, so negativity bias is this really big, broad thing as I mentioned. And so the explanation that a lot of people give for this general phenomenon is at a really like high level.

It's like this really broad type of explanation for this bias that it's evolutionarily adaptive or functional for people to be really sensitive to negatives that if we're sensitive to negatives, we're going to be more likely to survive threats and probably reproduce successfully. So just like in our

evolutionary history organisms that were tuned to negatives were going to be more likely to live on and pass on their genes.

Now, in contrast, if you think about, you know, ignoring the possibility of something positive in your life... What's going to happen if, if you, you know, if, if in that type of situation, you know, you might regret something. Maybe you might have this like fear of missing out. But probably nothing really bad is going to happen if you ignore this positive thing. In contrast, if you ignore a negative thing, like a tiger that's approaching you or, you know, like a coronavirus type of thing. To use a relevant a real world example. Probably some bad stuff's going to happen. Like you could die. And so that's the broadest highest level explanation that people give. Now, of course, for specific instances of negativity bias, like the negativity bias in sequential framing effects or reframing effects that, that I study, there are like lower level explanations.

And so, yeah. This is actually something that we're working on, and we don't have an answer that like I'm a hundred percent behind yet, but, but what we've found so far is that it seems to be something cognitive, but it's actually the negative mental representations are like conceptualizations are stickier.

So it's more difficult. It's cognitively more difficult for people to convert from a negatively framed concept to a positively framed one, compared to the reverse. And so we've done studies where we've given people the same math problem. It's like 600 minus 100. So there are like 600 lives at stake. Just again, it's, it's very similar to the coronavirus. And you know, and 100 in one condition can represent the lives that are saved. And in another condition, we say, you know, 600 lives at stake, but 100 lives were lost. And then we asked people to do the conversion. So how many lives were lost or hurt?

How many lives were saved? The math problems identical, but it takes people longer to solve this problem that requires converting from the negatively framed concept to the positively framed one, compared to the reverse. So that suggests that it might not be some, you know, it might be a cold sort of cognitive process rather than sort of a hot, maybe motivational one.

But we don't know a lot more other than... I have some very, very new research that we're writing like today with some colleagues at cologne, looking at memory. So one thought we had is could this negative stickiness be driven by differences in memory? Or could it be something about attention?

And we're not finding... using a similar like sequential paradigm... we're not finding any differences in memory for like the first piece of information or the second piece of information by this, this, valence order condition. So it suggests that, I mean, maybe that's not super surprising because we're studying this like... the first piece of information and the second piece are very close in time.

Maybe in the real world when people get stuck in something negative, there might be differences in memory. I'm not sure. You know, more time might go by between framing and reframing. But, yeah, so, so at least preliminary evidence suggests that it might not be driven by memory. My money is on something about attention, or like maybe even a mind wandering or like, you know, a thought that the negative thought keeps coming to your mind even.

Andy Luttrell: [00:15:43]
So it looms larger?

Jehan Sparks: [00:15:45]
It looms larger and yeah. And it's more persistent.

Andy Luttrell: [00:15:50]
So I could remember the positives and negatives, but it may just be that I'm choosing to wait the negatives I'm being cautious. So I'm waiting the negatives more than the positives. And so are there like individual differences in this?

Are there some people who are... call them, I dunno, positivity forward? Who just say like, you know, all I care about is the positives. I'm going to base my decisions on the positives and I don't care what the negatives are.

Jehan Sparks: [00:16:16]
Yeah, that's such a great question. So yeah, I have one paper about age as an individual difference, and actually we show them that as people grow older, this negativity bias gets smaller and that it might even go away, as early as age 60 or 65.

So, and, and looking at just our individual data, of course, there, there are individual differences. We haven't really identified one that's like clearly driving the effect, and would moderate it, other than age so far, but, you know, age is really interesting because they're important theoretical reasons to expect that to be a moderator.

So there's this theory called socioemotional selectivity theory, which is about how our motivational priorities, shift across our lifespans. So what it says is that for young people, they have these long, future time horizons, right? So they're gonna prioritize learning new things and, you know, in that type of context, a sensitivity to negatives might be really functional because these people need to survive in order to reap the benefits of all these new things and people that they're, they're interacting with and learning about.

But as we get older, our time horizons shrink. And so we're going to prioritize more present-focused goals, which tend to be more emotional goals. So we want to just feel good. And when you want to just feel good, you're going to focus more on positives. So you're going to prioritize positive things and sure enough, the, our data suggest at least that the negativity bias diminishes.

We don't, we didn't quite have enough data to look at whether it would flip into a positivity bias in much older age, but we would expect that.

Andy Luttrell: [00:18:06]
I've seen some stuff before connecting negativity bias to risk taking the idea of being fit. That you're more willing to take risks. If you're not accounting for the negatives, you're not paying special attention to the possible negatives.

And one group that would seem especially prone to risk taking behavior would be people in their teenage years or super young adulthood, but that's a group for which that future longevity, future orientation focus would suggest that this group shouldn't be especially risk-taking or have an especially weak negativity bias.

And to your connection earlier with, coronavirus, I'm sure you saw that, that video going around of people on spring break, who very clearly are willing to take risks and overlook all of the real risks of doing that. So I guess the implication that I'm getting at is that if older adults have a stronger negativity bias, does that also suggest that they're more prone to risk-taking?

Jehan Sparks: [00:19:02]
Well, so what we're finding, can't speak... the age moderation can't really speak to risk right now just because we haven't... I have some other work on like risky choice framing, but the current, the work that I was talking about isn't about that. So it's a little bit of a different thing. What we do see, not looking at age, but we see a negativity bias when people are considering different risky choice frames. And risky choice frames are just, where, you know, it's actually the classic unusual disease or it's called "Asian Disease Paradigm" too, but I'm trying not to use that word, but just so that people know what I'm talking about, where it's, it's actually, I know it's actually exactly like what we're going through right now.

This is super interesting for me, but you know, there's an outbreak of an unusual disease expected to kill like 600 people. And there are two programs to combat the disease that are equivalent in what we call expected value. It just means they're mathematically the same thing, but one involves no risks. So it's like a sure number of people will be saved, right. 200 people. And then the other one is some sort of probability that's equivalent, mathematically to the other one and you ask... and it can either be framed positively as like lives saved or the whole problem can be framed negatively as lives lost.

And what you see is that when it's framed negatively, that people are more risk seeking. And what, what we've shown... and that that's like a, that's called the risky choice framing effect. So that's framing at one time point, but we do the same thing I described before. So we reframe it in the opposite way.

And we also see this negativity bias such that people's risk preferences don't change as much when frames switched from negative to positive. Compared to when frames switched from positive to negative. So yeah, I can't really speak to whether that also is moderated by age, in this way, or yeah. But, I think I would expect it to, if we had those data.

Andy Luttrell: [00:21:08]
So the sequential framing is where you're giving people two scenarios back to back. Is that what you're saying?

Jehan Sparks: [00:21:13]
So it's the same scenario framed either positively and then negatively or negatively and then positively. Yeah.

Andy Luttrell: [00:21:19]
Yeah, I just want to pause and see if, because I always get tossed around in what these mean.

I remember in college, I read one of the early pop Judgment and Decision-Making books and I just couldn't wrap my head around what these, these scenarios... I was like 600 lives lost versus...? So let's back up and just, maybe we can start with, well, I don't even know where to start, exactly.

Jehan Sparks: [00:21:45]
Let's not do risk because risk is slightly more complicated.

So let's say, that, there's a jobs program. And the goal of the program is to prevent jobs from being lost. So the negative frame of this program could be that 60% of jobs will be lost and the positive frame could be that 40% of jobs could be saved.

Andy Luttrell: [00:22:09]
Right. And in the end, that's the same thing.

Jehan Sparks: [00:22:11]
That means the same thing. Yeah. It's like a glass of water, half full or half empty. Yep. So that's something called attribute framing where you frame a single attribute of an object in mathematically equivalent positive or negative terms, sort of the simplest form of framing. And it's what most of my work has focused on because it's just a more basic way of thinking about valence, really.

Andy Luttrell: [00:22:36]
So in a case like that, a basic bias account would say people prefer which of those frames?

Jehan Sparks: [00:22:44]
So it doesn't say anything about what.... So all of the framing effect is that that'll differentiate people's attitudes about the same object.

So when the glass of water is full, they like it more than when the glass of water is described as half empty and they like it less. But there is not, it's not that from like a neutral baseline or whatever that actually, the negative frame is stronger than the positive frame at Time 1.

That hasn't been shown as far as I know, it's really just that attitudes get pulled apart about the same thing when they're initially framed. And then what we show is when it's reframed, that that negative thing sticks more, right? And influences how much attitudes change. Attitudes change a lot less when you first saw it negative than when you started with the positive.

Andy Luttrell: [00:23:44]
So basically you're getting people to form a negative opinion versus a positive opinion based on the way that you frame things. And then when you reframe that thing, if I had started with a negative opinion, based on the way that you described it initially, it's much harder for me now to see it as something positive.

Is that right?

Jehan Sparks: [00:24:04]
Exactly.

It's really hard to change people's attitudes. That's exactly right when it started out as something negative.

Andy Luttrell: [00:24:12]
Yeah. So let let's get into the weeds a little more and talk about like what valence itself is, right? What is it that actually differentiates good versus bad? Right. It's such a simple division, but I often get caught up in this idea that like, what is it actually, tangibly, that's different between something that we call good and something that we call bad? And on the one hand, you could just say that the brains are built to process value. Lots of value is good. Less value is bad.

And this is just sort of a quirk of how your brain appraises information in the environment. So in that way, it's idiosyncratic right? Is just one person's evaluation. But is there anything, and maybe this is weird, is there anything that tangibly we could say in advance is the difference between what's good and what's bad, right?

Is there any way to identify something like that?

Jehan Sparks: [00:25:07]
Yeah, that's a very, very interesting question that I would probably need to think a lot more about. I'm sure that there, I mean, there seems to be a lot of consensus, let me put it that way, over things that are good and bad. Like in general, with moral attitudes, I think there's quite a lot of consensus.

Killing someone is, is bad for almost all cultures in almost all places. You know, most people are happy when they get an A and sad when they get an F. So clearly. Yeah, I guess the question is like, is that just... is that something about like the fabric of the way that we've evolved? I mean, that, I don't know. I studied philosophy, so I...

Andy Luttrell: [00:25:51]
I guess another way to frame where that question was coming from is really just like, are we justified in making a qualitative distinction between good and bad? Like, is it categorically a different thing? Or are these just labels that we put on something that actually in the end is super fluid. And I was thinking of that because you were talking about some, evidence that there are sort of fundamental differences in the way that the brain attends to or stores or represents negative versus positive information.

I was wondering whether that is evidence that we use to say that fundamentally, that these are qualitatively different things. That negative and positive are really truly processed as separate things. Versus we've just learned certain associations with the concept of negative. We've put baggage on the word negative that we're not necessarily putting on the concept of positive.

Jehan Sparks: [00:26:44]
Yeah. I mean also a really wonderful question. I mean, I don't think about these things as being so categorically different. Like, I mean, when I ask participants, I talk about it as people really liked this thing, or really didn't, but these are like scales and, the slider scale. So like people are, you know, it's not categorical, I guess, in, in the way that we measure it and not in the way that we think about it.

And in fact, a lot of my work is about how these categories are too simple. And, that there are some other theories that are, that are important to consider. So a lot of my work's about regulatory focus theory and actually a lot of my work, which we haven't talked about yet is about when we shouldn't expect a negativity bias, when we don't see it, what are the limits?

What are the bounds to it? There's a large positive element to a lot of it. And, but to just, you know, discuss regulatory focus really briefly. It's, it's the idea that, so, so this negativity bias and sequential framing that we've been talking about seems in my research to be confined to situations where people are thinking about a potential punishment or a loss, and, and there are many situations like that.

Most situations are probably like that, but that isn't to say that we can't construe from the very beginning, the whole issue that we're presented with as something that could be a potential gain or a potential reward, or in the language of regulatory focus from a prevention to a promotion type of mindset, to think about the issue initially.

So in the context of like a job policy that could prevent jobs from being lost or saved, that's really a potential punishment, right? Cause you're like jobs lost is you're below baseline job saved is you're sort of back at your baseline. But what about a policy where there are these new jobs that could be created above and beyond anything we've ever thought of before?

And, and if those don't materialize them, we're back at our baseline. So it's this above baseline type of situation that I call the gain domain or, regulatory focus scholars call like a promotion focus. And it should at least theoretically, we should be able to think in that way. In some contexts, we found it to be difficult actually to get participants, to think in that way.

But when we're able to, what we see as some situations where people are able to actually get stuck in the positive frame, or at least be even handed and assess negatives and positives more evenly. Yep.

Andy Luttrell: [00:29:29]
So what would be something that would get someone stuck in the positives?

If it's the gain domain, I'm thinking of something like, you know, you tell me that I can get a million dollars, if I do something and I go, "Wow! A million dollars!" That's like a super gain oriented idea, and then you go, well, you're going to also have to do this thing, this other unpleasant thing and this other unpleasant thing.

And I go, yeah, but it's, it's a million dollars. Intuitively that feels like what you're saying. Is that basically what you're getting at?

Jehan Sparks: [00:29:56]
It is kind of, yeah. So we would think of like a lottery type of thing. As long as you don't construe it as like something you could lose or there's no actual costs to you.

So it may be moderated by like the amount of money that you're suggesting. So like large amounts. What we have found is that if it's something, if it's unfamiliar or novel and like a real true gain. So like some sort of, new technology to like, make it easier to chat with your family online or something like that, this shiny new technology it's like, we don't really know that much about it yet, but it sounds like it could be, has the potential to have this giant reward.

That that's when people may be really attracted to positives and positives may stick with them. This might be why people buy new gadgets that come out that like claim to do these some huge improvement, a real way that we can advance things. Or like a new political candidate might come out who has, you know, is young and it has all these great new ideas. We might get really excited. So it could be driven just by our excitement and this, a positivity bias in this context could push us to discover rewards that exist when we don't yet have a lot of information about the rewards.

Andy Luttrell: [00:31:18]
Yeah. Yeah. A lot of it sounds like it's deviation from a status quo. There's the neutral or baseline that baseline language is what made me think of that and how, you know, negative is not status quo. So you can, I mean, I guess you could adapt to negatives.

Jehan Sparks: [00:31:32]
You can adapt, yeah.

Andy Luttrell: [00:31:34]
Yeah. If there was a lot of it there. But generally the idea is that negativity is not what is expected, so it captures our attention more. And actually what this reminds me of is this research in moral psychology, moral character, moral impression formation, where there's this negativity bias there. Where if I find out that you've done 20 ethical, virtuous things... you give to charity, you volunteer, you, you do all sorts of wonderful things, I go, "Oh, that's nice."

But then I find out one immoral thing about you and I go, "Ooh, what a monster!" Right? So it's that same idea where we've just adapted to this idea that most of the time people are decent human beings, but it's especially unexpected or unusual to find out that someone has done something that we would think of as sort of normatively unethical.

Jehan Sparks: [00:32:24]
Yep. Like diagnosticity or yeah. You know, how rare thing was, are all of these have been shown to be other potential explanations for negativity bias and, and the, the ecology. So the way that our environment is set up. Some of my collaborators at Cologne study negativity bias in this way, and have, you know, shown that, there's a lot more positive information in our ecology and our world and our environment than negative information.

And so, yeah. There's a negativity bias because negative things are actually rare. They're more distinct. They're diagnostic.

Andy Luttrell: [00:33:01]
Yeah. Matt Rocklage has this research on, I think, on a product reviews and there's this sort of a dominance of positivity in these reviews. So on Amazon, you know, the most reviews, most products have an average of four and a half stars or something like that.

And so we don't learn a lot as consumers by looking at the difference between four versus five star reviews, because yeah, it's just, that's, what's common. Whereas we learn a lot more when we encounter a one star review because it just tells us more. We learn more about it because, because it's uncommon.

Unless like you said, you put people in a very gain-oriented frame of mind where all of a sudden, now it becomes like, Ooh, this is so much better than I ever imagined.

Jehan Sparks: [00:33:45]
Yep. Exactly. So yeah, setting people's expectations might be a way for us to study the gain domain more because we're having a little hard time right now, given current events and coming up with these hypothetical scenarios that...

Andy Luttrell: [00:33:59]
So what are the big challenges to come with a bias or valence? Or where are you heading in your work? You talked a little bit about some of the new stuff, but where's this all going now?

Jehan Sparks: [00:34:10]
Yeah. I have a lot of new stuff that I'm excited about. So one area of work is showing that this isn't just about framing in sequence. It's not something about frames in particular. So far, we've stayed pretty close to that literature in judgment and decision making. And I've shown similar patterns of bias... most of the time, this negativity bias, but sometimes, especially in that gain

domain, you know, contexts where things are really novel and sort of exciting, that positivity bias.

So I've shown this in counterfactual thinking. So, when something that's happened in the past and you're thinking about how it could have been better or it could have been worse. And I would suspect that similar patterns would also play out if you think about things in the future. But there are many other valenced mental processes, like social comparisons that we could study and just sort of see how broad this, this framework is, where we make valence more complicated in sort of two key ways. And one of them is that we're looking in sequence, right? This positive, negative versus negative positive. So how are people switching? And then the second is that we're not just talking about positive and negative. We're looking at domain two, this regulatory focus variable.

We're saying there are positives and negatives in the last domain and there are positives and negatives and the gain domain. So, so yeah, so counterfactual thinking.

I have some new work also on ambivalence, that you might be interested in. but it, yeah, it, it, you know, it occurred to me and my collaborator Iris Schneider at, the University of Cologne that, you know, if people are seeing positive and negative information in sequence, that it would be interesting to see, whether there are outcomes for ambivalence. So, you know, what we did is we used the same type of paradigm that I described where people rate their attitude toward an issue that's either framed in negative terms like, you know, jobs lost type of scenario, or in positive terms like jobs saved. And then everyone sees the same issue reframed in the opposite way and they rate their attitudes again.

But now after that second frame, we ask people how ambivalent they feel. We looked at subjective ambivalence, but also objective ambivalence, but the interesting results are, you know, so subjective ambivalence is about how conflicted and mixed and undecided people feel. And what we're showing is in those conditions where people's attitudes change quite a lot, where they're really flexible, so the positive to negative, right? They're just following along with the current frame. Those are the conditions where people end up feeling really ambivalent. Sort of make some sense, right? Like you're...

Andy Luttrell: [00:37:10]
Because you're actively tracking the back and the forth...

(Crosstalk)

Jehan Sparks: [00:37:14]
and now you're like, I don't know anymore! I'm confused.

Versus when that negativity bias, when we see that negative stickiness and the other condition, the negative to positive where people didn't change their attitude very much. They are less ambivalent.

(Crosstalk)

"It's just bad." So like maybe a potential, like good thing, at least you're, univalent at least, you know, your attitude and it's consistent, at the end of, at the end of this.

So that's, some new work sort of taking this to the direction of, ambivalence. I am also just sort of expanding my work beyond negativity and positivity biases and studying uncertainty and nudging healthy behaviors, in my new postdoc. So, so more on that to come, but, they'll definitely be more stuff about positive and negative information cause that's really ...

Andy Luttrell: [00:38:08]
It's at the heart of a lot of things.

Are there applications or applied...? Like, one of the things I'm thinking of is if you think about like drug commercials, right? Where they have a whole bunch of information where they say, Oh, our drug is going to cure this problem that you have. And then after all of that good stuff, they say, Oh, and also maybe all these horrible things are going to happen to you as well.

So that's a case where, it matters what order you present this stuff in. And so in a broader way, if you were to give advice to people who are in the business of shaping opinions, based on what you know about sequential framing or alternative framing or valence biases, tangibly, what, what lesson might you give?

Jehan Sparks: [00:38:52]
Yeah, I mean, if you want to convince someone... If you're okay with people having a negative attitude towards something, it would be very strong to start with the negative. And we think that is what happens in things like a lot of political campaigns. Like this might be why Trump was so effective, just getting this message of like fear and, you know, really attacking other people initially, putting down your opponents or yeah.

Pointing out flaws and other candidates that that's going to be a really effective way that will stick with people strongly.

Andy Luttrell: [00:39:24]
Yeah. I mean, there's a long history of attack ads in politics, and there's plenty of frustration with that tactic. But according to your, your bias stuff, that might be an effective strategy to start, set the bar at the negative, and then it makes it harder for your opponent to get out of it.

Jehan Sparks: [00:39:39]
And if you want to get people stuck in the positive, my advice would be like, really try to be shiny and bright and new. And, you know, probably Obama did a pretty good job of that. Like hope and change type of message. So I hope we see more of that. I would love to see more campaigns focused on that, but obviously it's very difficult to get that right. I think

Andy Luttrell: [00:40:01]
Well I think that's as hopeful and end note as we're gonna get here. So thank you so much for coming on here. We'll call it there. It was great to hear about all this stuff.

Jehan Sparks: [00:40:11]
Yeah. Thank you so much for inviting me. Yeah, it's really fun.

Andy Luttrell: [00:40:21]
All right, that'll do it for this episode of Opinion Science. Thanks to Jehan for coming on. To learn more about her work, check out the show notes for a link to her website and for more information about the show, visit opinionsciencepodcast.com or follow us at @OpinionSciPod on Twitter or Facebook.

And this is a very new show so if you like this and support what we're doing, please just take a couple seconds to review us on iTunes and share it on social media. It'll really help get the word out.

Okay. Well, that's all I've got for us this week. We'll see you next time. When we talk more about the science of opinions. Bye bye.