

Video Transcript: Scientists as Comedians

A video interview with Dr. Sara Yeo, by Dr. Reyhaneh Maktoufi

[Dr. Maktoufi] Hi all, and welcome to the first episode of SciCommBites interviews where we interview science communication researchers about their work. And today we have the awesome Dr. Sara Yeo with us. Sara is an associate professor in the Department of Communication at the University of Utah, her research interests include science communication and risk communication, public opinion of STEM issues and information seeking and processing. Thank you so much for joining us Sara, welcome!

[Dr. Yeo] Thank you for having me Rey.

[Dr. Maktoufi] Um and we will be discussing your paper, your 2020 paper that you wrote with your colleagues, Scientists as Comedians: the effect of humor and perception of scientists and scientific messages. I think this topic on humor and comedy is just something that I'm also really curious about and excited about because I've been talking to a lot of science filmmakers and science communicators and the topic of humor is always we do want to use it especially for a youtube producer or we're on social media but you have all these worries about am I going to be credible, am I going to be seen as authentic, so...and it's always helpful to see what the literature says and what are the experiments that say should we use humor, if yes how should we use it so I'm just gonna ask you Sara if, um, if you're talking to a communicator to a filmmaker how would you kind of summarize the findings of this study in a more practical sense.

[Dr. Yeo] Yeah so I think I would summarize it as uh laughter works, right, that if we find something funny we find it more engaging. If we find a scientist funny we find them to be more likeable, right. We find them to be warmer but we also find them credible - it doesn't undermine their expertise, right. And so I think I would encourage uh communicators to think about how they can use humor with some caveats, right. So um not all forms of humor are equal, we'll just say, right. There's a lot of different types of humor when we think about it and break it down there's very benign non-offensive types of humor like wordplay and puns and then there's sarcastic satirical targeted types of humor that are likely to have different consequences than you anticipate.



[Dr. Maktoufi] So how how did you get to that in the process of the study? What was the experiment like?

[Dr. Yeo] Yeah so in this study in particular what we did is we um randomly assigned students actually uh to two different videos and the video was of a physicist doing stand-up comedy and he's telling science jokes um and we either had the laughter embedded in the video or removed the laughter, right, so they were randomly assigned to a laughter condition or a no-laughter condition um and those who..so laughter is a social cue, right, when we hear laughter around us we think that something is funny. This is why sitcoms for example have piped in laughter, right, um it's to indicate a joke to us. As social creatures we kind of recognize that, right. And sure enough um respondents who saw the video that had laughter thought the video was funnier, right. It increased the amount of amusement they felt from it, the amount of "mirth" is what we call it, right, the experience of humor. Um, and that led to..and then we asked them about well how do you..do you like this scientist? Do you think that the scientist is an expert? Do you think they are credible, right? And in all cases the sort of more laughter or more mirth, more experienced humor is associated with higher perceptions of credibility, higher perceptions of likability, so this idea that laughter can humanize you, right? But of course the jokes he was telling were um very benign, right, they weren't really targeted. You can see how sarcastic jokes might target someone um and target someone other than yourself right? [Dr. Maktoufi] yeah

[Dr. Yeo] and so that's what we ended up doing in this experiment so and he and again in this experiment he's telling jokes that are maybe targeted at himself but mostly that don't have a target at all, right, that that are just sort of funny science jokes.

[Dr. Maktoufi] so self-deprecating jokes sometimes okay in a way

[Dr. Yeo] Yeah so actually this is the follow-up, right. Are self-deprecating jokes okay and perhaps that matters on uh depending on who you are, right? Um and actually we are doing in the process of doing a follow-up study, we've just got our data back. I've just run a little bit of analysis and it kind of looks like it doesn't really matter, right, so we examined um we had some actors and some comedians actually tell the same science jokes and we recorded those in a video we had um and then we changed the labels we had scientists or maybe we labeled them as comedians. We also had different



actors so we had men and women and then we had an african american men african-american woman and then a white man and a white woman and it turns out the amount of like how funny people thought it was was not affected by who these individuals were, right, whether they were male or female or what race they were and so that's the preliminary finding of that.

[Dr. Maktoufi] Yeah I would love to once you're done with the analysis to learn more because I always worry that especially like as women of color, like am I by default being seen as less credible and I'm a person that likes making jokes all the time um and it does worry me that like if I joke about this am I gonna gonna be seen even less credible so it's good to know that not only being perceived as funny is good in the sense that it's funny but it's also more likeable and it seems that hopefully in the future result that like it's okay if you're a person of color if you're a woman it still might work right?

[Dr. Yeo] Right, yeah and actually the only thing that um seemed to make a difference was whether we labeled the individual as a scientist or a comedian. Um so yeah and if they were labeled as a scientist people perceived them to be more credible, to be more of an expert.

[Dr. Maktoufi] So you already by default have the credibility going on because you know they're a scientist

[Dr. Yeo] Right

[Dr. Maktoufi] you have all the associations.

[Dr. Yeo] Yeah when you're you know you're telling science jokes it doesn't matter that you're joking about it right it doesn't undermine that credibility or that expertise that people perceive you to have

[Dr. Maktoufi] You're a credible person with a good sense of humor

[Dr. Yeo] Right

[Dr. Maktoufi] yeah



[Dr. Yeo] yeah I think one of anecdotally one of the things I often hear um is that well scientists are so robotic or they're so cold you know versus warm, right, um they're not very human and by that we just mean like they're not very warm they don't seem like the rest of us uh but you know, you're a scientist, I'm a scientist, we seem pretty warm I would hope [laughs]

[Dr. Maktoufi] yes [laughs]

[Dr. Yeo] Yeah yeah and humor can kind of humanize the scientists right make them seem warmer more likeable

[Dr. Maktoufi] And I'm kind of curious because you mentioned mirth so this idea that like you hear this laughter you perceive something or someone to be funny so it doesn't even have to be the joke. So in a way if I'm a person that has established to be a funny person with a sense of humor that kind of like relationship building and like saying that hey I'm that kind of person that already hurt helps with my perception so I don't have to like even always make a joke or be funny because that perception that idea of me as a funny person or this being a funny situation already works?

[Dr. Yeo] Yeah it's maybe not necessarily you as a funny person but if the context if other people also think this is funny - this is like the social norms research, right, in communication around...so you think about facebook or twitter the "liking," right, these are social cues that we use to, you know, form our own opinions. It's kind of similar to that, right, when there's laughter around something you hear others laughing around you. Socially that indicates to you that this is oh maybe this is funnier than I think it is or this is funny, right. And people have sort of individual traits that differ. We have a trait that's called "need for humor," right, where individual people have different needs of humor it comes um from the "need for cognition" literature if you're familiar with that but need for humor is this idea that well you like to either be um in situations that are humorous you like to generate humor, right? Uh and so we we use some scales to measure that.

[Dr. Maktoufi] I love this, I am definitely high on "need for humor." [laughs]

[Dr. Yeo] Yeah, we both..yeah I feel like I am too I find a lot of things funny, maybe inappropriately



[Dr. Maktoufi] Yeah you literally..

[laugher]

[Dr. Yeo] but you know

[Dr. Maktoufi] there's a scale for us, I love this.

[Dr. Yeo] There's a scale for us yes.

[Dr. Maktoufi] Um so there were like moments where we were like that's, like, let's not generalize that it doesn't work with everything like context matters. So what don't you want people to think you're saying with your research

[Dr. Yeo] I don't want people to think I'm saying that any joke that you make is going to make you more likable, any science joke that you make is going to make you more likable, right, because we know that there are sarcastic jokes around science. Think about the issue of climate change, right, think about jokes around anti-vaxxers that are quite prevalent now for example right i don't want the message to be anything as [__] like any joke is okay, any joke increases your likability, because that's not true. Like you said the context matters, the type of humor matters, right, the social situation matters, whether your your humor has a target that matters.

[Dr. Maktoufi] Yeah yeah that and that makes a lot of sense in the sense that sometimes we have a we have a workshop that I teach on empathy and we have like there's a Samantha Bee section and then we start like talking about do we find it funny or not and you have a lot of people that are like this was hilarious and there are other people that are like I found that to be like actually very offensive, I don't think it was funny. So you can completely see that something that could be designed as a joke and something humorous could be completely misinterpreted so it, it could, it could work for a certain group of people depending on what they believe or they like that person or not and just what the content is, so.

[Dr. Yeo] Yeah absolutely so certain groups of people depending on their values, depending on who they are, right, will find some jokes funnier than others and I think Samantha Bee is a really great example. But any of those other satirical um news comedies, right, the Daily Show, what used to be the Colbert Report, um these are all..they're funny uh to a group of people.



[Dr. Maktoufi] For sure, for sure, they have their own audiences, yeah. Sara, this was so helpful the next time a science communicator asks me about can I use humor and I'm a little hesitant, I could be like I have some answers based on evidence so thank you for that.

[Dr. Yeo] Yes thank you for having me!

[Dr. Maktoufi] Thank you! So uh now we're gonna move to the second part of the interview, the weird interview section - it's a lightning round, and don't overthink it, don't worry, it's going to be some low-key questions to get to know you better. Are you ready for it?

[Dr. Yeo] Yes.

[Dr. Maktoufi] Awesome, okay, if you could live in any fictional universe where would you want to live? This middle earth, Narnia, Hogwarts, up to you. H

[Dr. Yeo] Has anyone seen Cowboy Bebop? I would totally live in that, yeah. I would totally live in that.

[Dr. Maktoufi] Yeah I love it, I love it. Why?

[Dr. Yeo] Or The Expanse, The Expanse.

[Dr. Maktoufi] I've watched the first few episodes and then I never continued.

[Dr. Yeo] Yeah.

[Dr. Maktoufi] So, space, like uh somewhere

[Dr. Yeo] Sort of, yeah, i think so.

[Dr. Maktoufi] Okay with like good company

[Dr. Yeo] Yes

[Dr. Maktoufi] and a dash of adventure



[Dr. Yeo] a dash of adventure and some modern amenities. I feel like indoor plumbing is a must.

[Dr. Maktoufi] Yeah yeah I agree I agree. Um if you were a musical instrument what musical instrument would you be?

[Dr. Yeo] Bass guitar.

[Dr. Maktoufi] Why?

[Dr. Yeo] I, I don't know, I guess I like the low bass tones.

[Dr. Maktoufi] You answered that so quickly, and I'm like okay you you know what instrument

[Dr. Yeo] Yeah i think i would be a bass guitar

[Dr. Maktoufi] Okay okay, I love it. Um so if you could have any job but the other one that you have in academia what job do you want to have?

[Dr. Yeo] Oh that's so difficult. Um I would do something outdoors I would maybe.....be some sort of guide, like outdoors activity type of guide. I don't know, or a dance teacher

[Dr. Maktoufi] Nature nature guide

[Dr. Yeo] Yeah

[Dr. Maktoufi] And like dance in the nature guide

[Dr. Yeo] Sure, yeah i don't know

[Dr. Maktoufi] Okay okay

[Dr. Yeo] And maybe this is good, right, this reflects on like I like my job, I haven't actually thought about having a different profession.



[Dr. Maktoufi] That, and also you're multi-talented like you have your job and you love it and you want to be in the nature and you can teach dance, which you already do, so it's all the you contain multitudes, Sara contains multitudes.

[Dr. Yeo] Thank you yeah talented multi-talented is very generous, I would maybe just stop at multi.

[Dr. Maktoufi] [laughs] III know you Sara, I think you're multi-talented. So if you could control fire, water, air, or earth, which one would you want to control and why?

[Dr. Yeo] Water.

[Dr. Maktoufi] Water. Can you answer these very fast.

[Dr. Yeo] I know, I um, I have degrees in oceanography and have a big affinity for the ocean and water in general so

[Dr. Maktoufi] Yeah.

[Dr. Yeo] I could swim apparently before I could walk, is what my parents have told me so yeah I had to have a big affinity for water for somebody living in a relatively landlocked state

[Dr. Maktoufi] [laughs] Water bender, yes. Um and the last one if they would make a biopic of you what song do you want to have as your intro song like this is you.

[Dr. Yeo] Oh dear, I have...it would be something either from Motown or something soul or funk related, that's what I know. And the discography of Motown is so large that I'm never going to be able to pick.

[Dr. Maktoufi] Wonderful, love it, love it. Thank you Sara it was great having you, always fun chatting with you.

[Dr. Yeo] Thank you so much Rey, good to see you.

[Dr. Maktoufi] Good to see you too.