



Graduate School

Understanding and Overcoming the Imposter Experience

JESSAMYN PERLUS: We're born with certain characteristics, right? Our sex, our age, our health conditions, maybe, and then there's all these other factors influencing how we move about the world and experience it. So how does this apply to impostor phenomenon? This impostor syndrome has been criticized for putting the blame on the individual without thinking about these other circles. It's like if you're aware of a stereotype, for example-- not true-- women are not as good as men at math. If we hadn't had historical sexism in messages in the world that contained that message, there wouldn't be this conflict of feeling like an impostor in the domain of math when you think about your gender. So tackling culture and building belonging is way beyond the scope of this presentation. But we're going to really focus on what we can do as individuals because that's what we have control over. But it's unfair that the problem exists at all. OK, another one of these. So here, I would like to know, what activates your impostor feelings? So maybe it's being in the classroom. Maybe it's lab meetings. Maybe it's-- I mean, don't put anyone's names in there. That's too much. But maybe in certain settings you can think of. When you read an article and you don't understand something. When someone says a term, you're not so sure yet. As you can see, this is a dynamic word cloud. So it's going to read every word individually. But thank you so much for responding. This is exciting. So I'm seeing lab, people, meetings, milestones. Yeah, definitely. Successes. When you become aware of other successes, perhaps. Presentations. Being in class. Journal. I know some of these were sentences that get pulled apart, so if there's anything I'm missing, feel free to put it in the chat, too. Yeah, great, exams. I came from a high school that didn't do grades, so college was a big shock. I had no context for like, what do these letters even mean, the numbers. OK. Students, cohorts, awards, clubs, presenting. It's not just in the classroom. Even the club experience or the outside of the classroom, allusions to other people's LinkedIn. Yeah, that's a good one. Great. Thank you. Thank you very much for sharing these. I'm going to move on to the next one. Oh, yeah, good emoji faces, too. Really captures the feeling. We don't have time. So now is going to be our only interactive activity. Zenobia is going to help me put you in breakout rooms for just five minutes. And I'd like you to describe a time you may have felt like an impostor. If you don't want to share something super personal, you can leave it more vague. Or you can say, I've seen someone else experience this. My hope is that you talk to each other. If you're uncomfortable about that today, or maybe you're on a bus or something and can't do camera off or talking, you can just stay with me in the main room so that the other folks in your group are able to talk more easily. So just going to be a quick five minutes, then we'll get back. I'll share some. I'll see if any of you are willing to share some. And then we'll move along with the rest of the presentation and how to overcome it with just a few other Poll Everywhere activities. So, Zenobia, are you feeling ready to put them in groups?

ZENOBIA LEE-NELSON: Yes. Everybody should be able to join a room now.

JESSAMYN PERLUS: Wonderful. Thank you. I like to share some of mine. So it's not fair to ask you all to share without me sharing as well. I was very scared to apply directly to PhD programs. I thought I had to do a master's first. I was very intimidated by statistics. The first time I was invited to review an article in an academic journal, I was like, I'm just a student still. I don't know what I'm doing. I still did it anyway. You can seek help and support for these kind of things. I published a first author paper, and I didn't want to do any press about it. I didn't want the journalists to like read my article and then ask me questions that I couldn't answer. So I did it, too, but I didn't enjoy it. I got invited to be on an advisory board last month, and I didn't want to do that. Who am I to advise people? I don't know. What does that even entail to be-- I had to Google advisory board versus board of directors to see if there was a difference, and there was. So it can still crop up and happen. But is there-- looking at the time, is there maybe one other person that wanted to share something? I will read a comment from the chat as we're figuring out the audio, feeling like an impostor with a major life decisions I make, like grad school, very grateful and easy choice to opt in, but there was some confusion. Am I making the right choice by taking a break from the industry right now? Oh, yeah, that's a huge one. In career counseling, we talk students through that a lot. In my study, I compared imposter feelings of people who have gone straight through to grad school directly from undergrad and those who had taken two to 25 years off in between their graduate education. And both of them felt like imposters for the opposite reasons. I haven't been out there and worked in the industry. I don't know. And the others felt I haven't been in school for a while. I'm going to be behind. But there's real financial calculation and life calculations to do as you're making the decision to go, so thank you. Really, really common. It also came up in my study international students pointing to a number of experiences they were having with the learning a new institution system and a different language. And it sounds like you've already practiced some of these thought patterns or advice you give to yourself, reminding yourself. It's amazing that I'm here studying and in a language that's not my native language. That's an extra impressive. Group talked about feelings of IPN or Cornell interviews and reconciling those feelings as we prepare for entry. Yeah, it's going to be an ongoing process. I'm going to keep us going, but thank you so much for engaging and sharing. Usually around this time, people are feeling meta-imposter syndrome. You know, a lot of people have it. You see that that's fine. They're great. They're not like you, the real imposter. This is a joke. This is not a real thing. Not a thing. But I mentioned this a little bit earlier, but why does it even matter if you are so high-achieving? Who cares? We care because you're not achieving everything you might be capable of. And when you do achieve, you're not able to enjoy those successes. And there can be some mental health consequences that are going hand-in-hand. And because you're functioning so high, you're maybe not drawing attention of like faculty or student services or something. And it can be so isolating. So that's why I've forced you to talk to each other. Usually, that's the most memorable part of my presentation. It's not the slides. It's you actually got to talk to some other students about, oh, they're feeling it too. So thank you for participating in that part. So these are

some of the things that it's related to. Each of these boxes represents one or more correlational studies. As we know, correlation doesn't equal causation. This doesn't imply that if you have this, it's going to cause impostor feelings or the other way. But if you have impostor feelings, you're more likely to make more comparisons between yourself and others. More likely to have higher perfectionistic tendencies. There's two pieces of perfectionism. One is having high standards, and one is being upset about the discrepancy between the high standards and where you see yourself. So both of those are highly associated with more impostor feelings. High impostor feelings, lower self-esteem. High impostor feelings, lower self-efficacy. Self-efficacy is this belief in yourself and your ability to do things. Self-efficacy for math. Self-efficacy for I can figure out the bus system here and the kind of helplessness, maybe. Oh, yeah, thank you for the chat. That's great. Higher feelings of anxiety and higher feelings of depression and isolation. Again, we're not talking about diagnosis here. We're talking about symptoms like isolation or worry or psychomotor agitation or something like that. So those do tend to co-occur with each other and with impostor feelings. And locus of control. That means whether or not you see yourself as in control of your life and what's happening to you, or if you're just drifting in the wind kind of at the mercy of the rules and regulations or other pieces. So often with higher impostor feelings, you don't feel like you're able to take control of your life. You don't have that internal locus of control. So it's a lot to take in. These are four quotes from my study. I took away all the slides about what my study was, but I did qualitative and quantitative methodologies. And so these come from surveys, interviews, and focus groups. And I like these quotes because they're pretty common with what I hear in Career Services. So I don't ask questions because I think I should know everything already. That's really tough. Picture yourself in a class or a lab meeting or an orientation session where they're mentioning this thing and you didn't get the link. You're not too sure how to do it. That can happen. This hesitancy to network because I don't feel like I know anything yet, or maybe like that student was mentioning being international. You're not sure how networking works in the US and how much is normal to put yourself forward or what kind of questions are appropriate to ask. So you sit out of it entirely. This person, Emma-- not her real name, these are fake names-- said the problem for me is that I've tied so much of my identity just to my academic accomplishments that if I have a setback academically, it just guts me. Whereas if you have multiple identities, maybe you're a sibling, a cook, a runner, a gymnast, I don't know. Remembering that those are all sorts of things you get self-esteem and accomplishment from, not just only academics. And this last person talked about passing up promotions because they just wanted to stay where they were under the radar. Oh, it's giving me the spinny thing. Too far. OK, here are some other career consequences also from my dissertation study. So when people are feeling impostor feeling, some of the career consequences might be they're not submitting things. So some of you are talking about your Cornell applications to grad school. Like, think of all the people who wanted to come here but didn't even have the bravery to hit Submit on that application. Or it could be for grant scholarships, prestigious things. Across every industry I looked at-- I looked at opera, and they were feeling it too. They didn't want to go on auditions for some things. Staying in the comfort zone. So not asking, not negotiating. We see that a ton in Career

Services. Students are so excited to get that internship or job that they don't even think about, oh, you're actually being low balled in this offer. Isolation or not collaborating. Maybe, if you've ever been stuck, and you go to Google before you would ever go to the TA or form a study group to try to work through some of these things. Almost never are folks actually giving up or quitting a program due to impostor feelings. But usually, that's the number one fear. Like, one wrong move, and I'll be instantly escorted out. And that's not how it works, but that fear is there. Also, I have on here some of the reasons why people didn't submit those applications. So here we have another Poll Everywhere activity. How might impostor feelings interfere with your professional growth? So gave you a couple examples, but curious if any of these are particularly resonating with you, or you've noticed how in the recent past it's-- inaction, yeah, just kind of like paralysis. Not sure what to do. Miss a deadline sometimes. I'll bookmark it and come back to it later, and then the opportunity is gone. Self-sabotage, yeah. Taking risks is really hard. Not applying for a job I'm qualified for. Yeah, if you meet the minimum requirements, and you have interest in the position, why not? Can you guys-- oh, you can't see any of the results. My bad. No, you can. It says see responses. OK. Procrastination. Stop you from achieving more. Worried for no reason. Not taking risks. Not aiming too high. Don't participate in conversations. Lack of initiative. Good. An abundance of examples, unfortunately. But that's also saying that it's resonating, so. So you can still enter your entries, but I'm going to keep moving on so we can stop feeling so bummed out about this. OK. Is being an impostor good or bad? Some say that there are some hidden superpowers or some benefits of it. You're not at the risk of being arrogant. You can picture an arrogant person in your head right now, you know, where their confidence totally exceeds their capabilities. So being humble or having humility, being grounded, recognizing that we can be flawed as humans, that's an admirable characteristic, and that's the norm in a lot of people's upbringing. So it's good that you're not swinging too far in the other direction. And you can also be really tuned into information that's contradictory. So maybe you're not going to fall two blind spots, or you're going to double check something. And those are good habits to be developing. Our goal is really to just recognize the fact that competence is high and align the confidence to be with that-- not too high, not too low. In my study, I asked participants, what advice would you give to someone trying to overcome feeling like an impostor? And I got over 300 tips, including 20 people that did not feel qualified to give a tip. OK? This is a word cloud with some of those pieces of advice there. I'll just read a few of them. Keep a list of your accomplishments. Stop comparing yourself. Take a deep breath. Don't be afraid to ask questions. Everybody has their own journey. You deserve to be here. Get back up. Don't be too hard on yourself. So this translates nicely into some of the strategies. First up, we have thought strategies, cognitive strategies, things we can do in our minds to start to combat these. These slides used to be like 15 each, and I've cut it down significantly. The idea is that maybe one or two of these are going to resonate with you. Just feeling like you have some things to try before full-blown panic can be helpful. So one I think we've established today, remembering this is a really common experience. Notice when these doubts are arising, but don't buy into them. This is a technique called leaves on a stream from acceptance and commitment therapy. But it's this idea that I'm having the thought that I'm an impostor. That silly, pesky thought is in the background. I'm just going to let it float on

through my head and not be distracted. Whereas a difference might be, I'm remembering that true fact that I'm an imposter and incapable. My brain is reminding me how inadequate I am. That's not helpful. So it's just, oh, that thought, that noise is coming up, and I'm just going to keep ignoring it as best I can until it's able to move on. Reframing failure and cultivating a growth mindset. This comes from the work of Carol Dweck, but it's this idea that there's a lot to learn from a failure. Oh, I'm going to study better. Oh, I didn't get that grant, but now I have my bio already and all these pieces in mind. I can reapply next year. Kind of like taking the time to understand what the learning opportunities could be from there. Focusing on your own path, not someone else's. That's hard. I know that. But reminding yourself of it can be helpful. Memorizing a supportive statement when feeling self-doubt. That could be some of the statements from the earlier slide. Sometimes people have quotes that really resonate with them or a movie quote or song lyric or something. Some people save it as their phone screens to have a reminder nearby, post it on your laptop, whatever it takes. And this last one is similar to that quote from the participant we were looking at. This, remembering your other identity. It's not putting all of your sense of self into academics. It's important. It's big. I know that. But if you have a big exam, schedule time to be around people that refresh you afterwards. Finding ways to know how you personally work, what gets you up, what gets you down, and build in supports to keep you going. So these are just some thought strategies. And I'm also going to share some behavioral ones, things we can do tangible to try to combat these impostor feelings. Talk openly about it. Again, that's why we did it today. You can continue these conversations. Maybe you'll find opportunities to speak with other people in your cohorts, in your groups, and your departments or labs about some of this. Seek trusted mentors. Ask for feedback. Usually, every time I do this presentation, I do hear an example of a professor or someone anywhere, not necessarily at Cornell, that just gives horrible treatment, or says, yeah, you did just get in because fill in the blank. So I really hope that that never happens to any of you. But I understand it can be hard to figure out who can I trust. Who is going to give me genuine feedback. And so be on the lookout for those individuals. Treat yourself as you would treat a good friend. Often, the thoughts we have or things we say or do is nothing we would do to someone else. So try to remove yourself from it, put yourself out of it a little bit and treat yourself kinder. Celebrate your successes. Share your accomplishments. We saw that that was tricky in some of those free answer responses because sharing successes makes others feel bad. So find a way to do that. Maybe it's just updating your CV but not broadcasting it on LinkedIn. That's OK. In my study, two graduate students in chemistry and opera, I think, found each other and decided to be brag buddies. So they would tell each other, I got that audition, or I got time on the spectrometer. It's amazing. They didn't fully understand the scope and magnitude of what that meant, but they were able to support each other with no feelings of jealousy or something like that. So it truly is a skill to own your accomplishments and practice sharing them. Writing about your values or creating reminders. I mentioned some of these. That could be the quotes or why you're here. Some people have tattoos already. I always love it when someone has a reminder like that they've inked on themselves. The last one here is replace but with and. It's a really subtle intervention, but it's this idea that, oh, I got notified about that award again, but I'll never get it. You know? Instead, saying, that award is up

again, and I know it's a long shot. I'm going to apply. So just the but language is negative, and it negates the different clauses of what you're saying. But if it's this and piece holding two dichotomous things similarly, like it's a really long shot, and I'm going to try. I really don't want to speak in public, and maybe I'm going to challenge myself to do it for 10 seconds, something like that. So I want to pause for a second and read Mira's question. Has anyone ever experienced they were saved from certain embarrassment or failure due to imposter syndrome reluctance? I think that's the biggest trade you're facing when actually experiencing IP. Not defending it, but that is what it feels like. Well, yeah, I'm sure that's common. I probably could think of 10 experiences in my own life. It's hard to compare a negative because you can't split yourself and do testing in both scenarios. I find a lot of times a lot of people have the same question. So I was wondering that, too. You know, the professor made a mistake on the board. They said the wrong deadline. And now everyone else is also feeling this anxiety about how to respond and things. So there's no foolproof formula. It's not like, yes, always speak up every single time, every single class. You must ask a question. That would be perhaps excessive depending on the class. Well, that's a perfect segue to my wrapping up of the slides here. We want to recognize when we're having the thoughts and add more to the story. Oh, I'm having the thought that I'm not good enough. And I know I deserve to be here at Cornell. I'm going to try one or two strategies to remind myself of that. And it's going to come up less often as background noise. So the more you're noticing when it's happening-- oh, I'm having the thought that I could be embarrassed. Could this be a case where I truly am out of my depth, which could definitely happen? or is this a case where I'm out of my depth, and I'm going to challenge myself to ask anyway, or I'm going to spend 15 seconds looking for an alternative? Can I text someone the question? Can I Google it? Can I go to the course board and see if it's in the resources? Can I try to solve it and then make a decision down the line about whether or not you're going to ask that question that day? And also, embarrassment and failure isn't the end of the world. Getting through that is also a skill to build up because it won't be-- the avoidance of it won't be so interfering. 58. Eh! OK, you're just one part of the equation. Society and culture need to change, too. Even by coming and participating today, that's helping reshape the culture of graduate education on this campus. You know, being willing to name it, talk about it, think about it. So thank you for participating. Here's just a couple examples. If you're asked to serve on a committee, for example, don't just say no. Pause. Wait. That's my IP talking. Let me really think about whether or not I'm able to commit to this, not just an instant nope, scary, pass/ So remembering that your brain is adapting. Changing thoughts and behaviors means that you're unlearning negative patterns and replacing them with more adaptive patterns. That the neurons, the myelination is changing at that level. So it's going to take time. If you normally you would spiral and feel like an imposter for 25 minutes, and we get it down to 10 minutes, that's huge progress, right? It's not going to be an instant it's gone. So like I mentioned the tool kit in the beginning. We do have resources, videos, and a little bit more instructions on the What If I Feel Like an Imposter page. So feel free to check that out. It's got a lot of suggested readings and follow-up steps if you're interested. I'm going to skip that. You're also welcome to contact me. My email is there on the screen. I see student appointments. So you can email me, and I'll send you the scheduling link. That's probably easiest. I've got two

images of books on there. Dr. Pauline Rose Clance is the one that came up with this. This is like the book that introduced impostor feelings. And the other book I really, really like. It's not just for women. Any identity you might have, you can read it. It's got very practical checklists of things to think through. And it's got a lot of stories in it. And then the QR code in the corner has an opportunity for you to give me feedback. That'll go to Janna and the organizers of this series. So if there's anything I can learn to do better, I would be happy to grow from feedback. I will. How to access the tool kit. So if you go to that QR code or the website career.cornell.edu/toolkit, it'll redirect you to Canvas. You'll have to log in with your net ID, just your regular Cornell credentials, and then it's going to say Join Course at the top with the little plus. Then you have to click that. And then you'll be able to see the toolkit and navigate through it. But just send me an email if you're having trouble getting in. But I know I am at time. If there's any questions, we can take maybe one, but you can put them in the chat, too. And I'm happy to try to address them. We'll go one minute over.

SARAH DAY: Very quickly, I'm just going to put in a plug. The grad school did a series of articles where they interviewed faculty and leaders across our Cornell campus that's called the Faculty Who Failed series. And I'm going to put it in because it doesn't specifically address imposter phenomena, but it does talk about a lot of folks talk about like, this is how I learned how to ask questions, or I didn't know I could ask my advisor about this, and I thought I'd failed when my experiment failed or whatever. So there's some really great stories in there if you guys are interested.

JESSAMYN PERLUS: Thank you so much, Sarah, and I'm going to link that in the toolkit. I forgot that there was one URL I could do that. That was a really awesome series.

JANNA LAMEY: Thanks, Sarah. And thanks, Jess, so much. So I just want to make sure that we end on time. And so everybody's time is here. I'm going to put a thing in the chat as well as far as this is our first out of 12 primer series. And so please feel free to look this up and, you know, come to others if you'd like. And then, also, please do make sure that you do give us some feedback. So we want to make sure that we're evaluating what we do so we can make it better and better for other students that are coming in. But I appreciate so much, Jess, you taking the time and for all to take the time out of your busy schedule today just to learn a little bit more about imposter phenomenon. It's great that we're talking about it. And so I appreciate that Jess said, hey, look, let's continue the conversation, especially for incoming students because there is support and help. And the more we can talk about it, I do think it breaks down some of the stigma attached to it. So anyway, so thank you to everybody for being here today. So thank you. I see Sarah clapping for Jess. And again, thank you very much. Take good care.