

AT: Welcome to the Infinite Women podcast. I'm your host Allison Tyra, and today I'm joined by CSIRO behavioural scientist Dr. Emily Brindal, who uses her understanding of human behavior to help people investigate and promote healthy lifestyles. We'll dig more into her own work later, but first Dr. Brindal wanted to tell us about philosopher and psychologist Dr Mary Whiton Calkins.

EB: I got asked to join and talk about a significant female scientist. And to be honest, I couldn't think of any in psychology, which I thought was a bit sad. And I reflected and I thought, I'm pretty sure when we did the developmental work, there were some women in that like around kids growth, and I thought I don't want to do that, it's too predictable. So I went to Google and Mary Calkins came up. And the reason I thought she looked interesting was because she was from the oldest timeframe. So I thought, Oh, she looks like the beginning. And I'm always interested in the start. So yeah, so I thought I'll go for her.

And the more and more I looked, the more fascinated I got. So I really hope that I can do some justice by by sharing her story with everyone. So she's from America. She was born in 1863, so quite a while ago, and she has been described as the mother of psychology. So she was on the ground with many other academics right at sort of what we would call the birth of psychology in America. So in the late 1800s, psychology was an emerging discipline, coming from sort of philosophy. Germany got out the blocks early. So there was already a lab in Germany that was teaching psychology, but America was kind of just setting up their knowledge in that space. And that centered mainly around William James. And he had a lab in Harvard. So yeah, that's kind of where, where my journey started.

And Mary's journey actually started long before psychology existed. She came from a very progressive family. Her dad was a Presbyterian minister, and by all reports, wanted equally his daughters to achieve what his sons achieved. Didn't want barriers of society to prevent them from being intelligent thinkers, really, like he valued knowledge quite strongly. So he pushed his daughters through school - when I say push, I mean, like, he pushed others to let them go through school, you know, made sure he opened lots of doors. And they went over to Europe as well and she studied Greek over there. So and that's actually what gave her a bit of an entry point into what we now know as academia. She met some people over in Europe and saw that there was some women working in that field. She learned a lot about Greek history, and Greek philosophy and Greek language. And then when she returned to America, she began teaching Greek. So that was kind of where she started her career. So she was teaching Greek at Wellesley College. And then they sort of said, Oh, let's, let's do a bit more. And that's when she reached out to, to William James, and sort of started studying under him in Harvard. But I make it sound a lot easier than it was. They basically, because she was already teaching, they sort of justified her attendance at Harvard as I guess what we'd now call professional development. And they said, "you know, you're not really allowed on campus because you're a woman." And at that time, Harvard was only men. "But you might be able to just sit in and listen, not be part of the course." And that was only after multiple people had rallied around her. So her father, and a couple of the professors at Harvard had written and sort of justified her presence because you know, obviously women are very distracting. So just the presence was quite dangerous in in in 1900. The really nice fact is, so she got there, she was allowed to sort of watch, because psychology wasn't a thing, right? Like you need to sort of think about it in context. As she sort of got through the semester, she was the only one left - all the guys dropped out. So it was just her and William James, which I think is amazing. So like you look at the relationship that they shared throughout their careers. And there's just such a mutual respect for each other's ideas and growth of ideas like reciprocal. So his big book is an introduction to psychology. He's got like 59,000 citations for one edition, right? So this guy is like a big person in psychology very widely regarded still to this day. I even cited him in one of my undergrad papers, I'm sure, so you know he's a big name.

AT: And just to interrupt real quick. For any non-academics when you say 59,000 citations, that refers to the number of times other people have cited his work in their work. And so a high citation level usually indicates how influential someone is.

EB: Definitely.

AT: So 59,000 - that's insane.

EB: Definitely. And that's published citations. Right, so that doesn't count Emily Brindal's 2000 undergrad paper to get assessed, you know, this is like actual proper, other people have written papers that have gone through and been accepted and published. That includes that level. So I mean, to be sad, I think I read an article about you average paper, modern day paper will have like four or less citations. Yeah, so 59,000 is like, off the charts.

AT: I mean, he's had like 100 years or so to get that many, so there wasn't a lot of competition at the time.

EB: This is where you know, things get interesting, right? So he's had 100 years, but so has old Mary, and guess what her number one paper is, in numbers?

AT: I'm afraid to ask.

EB: Oh, I'll give you a range. Guess a range.

AT: 400 or 500.

EB: 200. And that was on dreams. So that was sort of like her first work that she did with him and another person called Sanford, that she started quantifying her dreams. At this time, and always throughout her career, she's very interested in self, and consciousness. So when we think today about psychology, we have lots of domains, right, and we break it into like, personality would be one. And we've got cognition, which is where all the brain, memory, thinking, sort of stuff fits. And then you've got the sort of more, I guess, I'm gonna say soft, but I think I'd be shut down by by Mary if she heard that. But there's sort of, I guess, less tangible concepts, you know, where they are more guided by philosophy and inductive thinking. So looking inwards first and deriving ideas from your own experience. So that's the sort of self area but she actually started in what now we'd call cognition and brain health, which is, today, good luck finding someone that has interest in both cognitive science and self, because we've made two ends of a spectrum here, and we tend to work fairly insular within our domain where she started off looking at dreams in a very quantitative way. Her and her colleague woke themselves up regularly throughout the evening, setting an alarm clock. I don't know what alarm clocks look like in 1900, I was gonna look that up, I'm quite curious actually. And then use candlelight to write down the exact dream they were having as it got interrupted. And they looked at the content and the vividness of the dream and the feelings and they sort of coded it all out in a very quantitative way, which today is one of our strengths and that we're proud of, in psychology, the ability to sort of take experience and, and quantify which means put a number against it and compare it. So she did that, and her paper on that, it's just, it's hilarious. Like, I love her. I wish in some ways, we could write papers like that back then, in like the early 1900s. It's very much a personal narrative of your process. So it was like, at the moment, like in psychology, it's very cold, very formulaic. So you know, we don't write "I," never allowed to put yourself in there. And you have to sort of follow a very, it's just a formula essentially, you know, here's your intro. Here's your method, and it gets very samey, whereas the papers back then when very much like, "Oh, I did this, and then I did that. And then I discovered this." And yet she still presented it with a table. And it's still sort of quantitative, just in a very much more personal way. And to the point, my favorite part of the paper is she, and that the language is just so much fancier sounding as well, I find when I read things from the 1900s. She describes her pencil breaking. So she's got these two or three sentences, and it's basically about the challenges with the method of recalling dreams, right. So it's pretty hard to recall dreams, which is why they interrupted this sleep cycle. But then to sort of have the cognitive function, like the awareness, to be able to write down what you've just dreamed

about, you kind of have to wake up, and she was saying, you know, once you've woken up, sometimes those dreams are gone. So they were trying to do it like immediately. And she describes this instance, where she woke up in the morning feeling like she had done her diligent research job, writing down her dream, happy, went to sleep happy, and then found out her pencil would had no tip on it, just scribbled nothing.

AT: Oh no!

EB: And this thing that she thought was so great, at the time, there was actually nothing. Oh, my gosh, like, it's just such a cool little anecdote, and that sort of idiosyncrasy's just not in modern research. It's like, don't waste my publication space with your story, like what's the relevance of this. But for me, I was like, that's just really cool. It's just a cool little, and it was quite humorous, I thought. I don't know, if anyone else thinks it's funny. But yeah, so she started out in dreams.

And that was kind of just something she did, I guess what, in what we'd sort of caught undergrad now, when she was learning initially under, under James, and then she sort of started to undertake a more structured program that would sort of form more of a PhD. And that work was around memory and, and what we now called paired association. So she was very interested in memory. And again, that's very, very heavily in the area of cognition, and how people store information, how people recall information, how people get information. And her method that she used was actually quite groundbreaking at that time. So basically, she made experiments to test different ideas, which is the core of all science. And the way that she did it around memory was quite groundbreaking in that day. Her primary observation, like if you go to the internet, you'll be told that was one of her greatest contributions to the field, she came out with a paired associates method. And the primary finding of that was, the more you see things, the more likely you are to remember it. Yeah, science isn't always exciting. But she also did find that if you pair certain things with other things, you do have improved recall. So it's pretty common knowledge now. But, like, if you put vivid color with a number, and then you show the vivid color, people are more likely to recall that number. So, pretty early to be sort of making these observations. And one of the things that you don't immediately find around this method was she also started noticing a lot of other sort of things about memory, such as what we now know as primacy effect.

So, I should probably tell you what of what a memory task is like, because not everyone might have had the joy of undertaking them, especially they haven't done undergrad Psych. But I guess most memory tasks are like, here's a list of things. Can you recall it? Right? I guess that would be your basic short term memory tests, then it gets fun from there. So there might be a delay. So they might show you a list, then get you to go off and do something else for half an hour, and then come back, and then ask you the same. Sometimes these lists are words. Sometimes they're numbers, sometimes they objects, like they'll vary what it is. And then there's also really fun things where they sort of challenge your attention and memory at the same time. So like, the Stroop test is a classic, which some people would be familiar with, you know, you start saying words that are color words, but in the wrong color, and you start really messing with the way people are storing information. So that's kind of where we've got to with a lot of these tests, and I've done them with participants and I've done them myself, so many times. But you know, she was kind of there thinking about it, making these methods which is, which is pretty cool. And in regards the primacy effect, everyone that's done undergrad psych would know what that is. It's like, one of the go-to things in the area of memory. And it's essentially you always remember the first thing. So you get this list of like 40 things, you tend to always remember the first thing and the last thing. And the middle is always a bit vague and lost.

AT: And the last thing, that's recency effect, it's primacy and recency.

EB: Yeah, that's it.

AT: I did take one psych class.

EB: Yeah, that's it, see everyone knows that. And there's actually one person who took Mary's results and kind of modernized them and re-presented them in a paper in like, '93 or something. He said, Here, I can see, she's the first person to use the term primacy. So yeah, she had great ideas. And she was doing some pretty cutting-edge stuff. And I think, to the point where William James then added a footnote to his very famous introduction to psych book that cited her work. So she was changing his thinking as well, which I think that's, regardless of anything else, for you to have your mentor cite your own work, it's a pretty big buzz, I think in any field, right? Like, it's kind of at that moment, that you've really won. So, she did that.

And then ultimately, Harvard denied her her PhD, which wasn't uncommon, unfortunately, wasn't a different experience of many other people at that time. And then she went back to work at Wellesley, and taught there for the next 40 years and set up a lab in psychology of her own and pushed through 200 to 300 students, I think, and then passed that lab on to another person that then also became, fairly known in psychology, Eleanor Gamble. So yeah, and Eleanor, and another woman, but also she was, I think, legally blind, just lots of challenges there, too. So within a year of retiring, died, so she was looking forward by all reports, to spending her retirement with their mom. She was still living at home throughout her whole her whole life. She lived with their parents. And she was looking forward to just chillin' out with her mom and getting closer to her mom. Then yeah, just died. So she didn't get a big retirement there. But in 1930, that was.

AT: And so that was in 1930. She'd set up the psychology lab at Wellesley in 1891. So she did have quite a long career.

EB: Yeah, 40 years. 40 years of teaching. And what I found really disappointing was when I was actually, so I can talk to you about the men that influenced her career, right? Very clearly documented. And I was like, But who did she influence, right? Like, for me, it's like, where's your legacy, right? And part of your legacy is, is who you influence. Good luck. Good luck finding anyone that says, "Mary Calkins taught me, and I'm great in my career." And some of these things are just historic disadvantage and bias, like the Harvard thing. And her own words are published a lot around her experience with Harvard. So she did write an autobiography, and in 1930, which is the funniest autobiography I've ever read, because when I hear autobiography, I think it's gonna be a story about you, right? Like, surely that's what it means. I didn't study Latin. But surely that means a story about me. She basically just spends the first half talking about her career. And then the second half is a pitch for why the self is so important in psychology. I think it's hilarious because it just shows you like how passionate she was about the place she'd arrived at, after all this experience and all these papers and thinking and teaching. She was still pushing very clearly, that we should be thinking of the self as the foundation of all psychology. Because at that time, like as you move sort of into the '30s, and particularly in the '50s, in psychology, the behaviorists were coming in, and the behaviorists are like hardcore, quantify where everything is a number. It was a big movement and essentially said, we're all molecules and molecules can be predicted and manipulated. It's funny because to me it echoes of the current world that I live in in terms of big data and data science and algorithms and AI. It's like, well, everything's a number. You know, we're going to be able to quantify what a thought looks like in the human brain. So what relevance is your thoughts in psychology, where's the relevance of psychology, if we're going to be able to map thoughts and tell you what you're thinking? So I do see parallels between that kind of 1930s behaviorism coming in and threatening the philosophy side of psychology. And to be honest, I think they won because, the way I learned psychology, an partly it's that political push for being a science because I think psychology is always a bit threatened that we're going to be told we're not a proper science. So we put a lot of effort into making sure we do things rigorously. And we put numbers on things, and we do lots of stats, like psych people, if you ever need stats help, if you ever need statistics advice, psych people are the people you want around you. But I feel like that kind of came at the cost of some of the more deep philosophical questions. And I think, Mary sort of held both of those equally, whereas I didn't even learn philosophy in undergrad. I know nothing about I have a Doctor of Philosophy. But I couldn't tell you much about the -isms at all. Whereas I think, then it was about thinking about who you are, and the depths, and all those things that we've kind of lost as a discipline, and sort of push that to

other disciplines, you know, like that's social science or that's philosophy. If you want to do that, you've got to go do that in that degree. Whereas psychology is more about the quantifying. And we have theory, like, don't get me wrong, there is thinking. But I guess it's deductive, right? Like, lots of people will talk to you about reasoning. And so that's like, the way you think about things. So you can have inductive or deductive reasoning and deductive is for me, easier. You observe events, and you go, "Okay, well, I saw this, if I do this, if I make this button red, someone pushes it more than if I make it green." Like you really quantify it as simple as behavioral level. Whereas inductive, like, let's start with an idea, let's really think about this, let's look at our own experience, let's build up to something and then test it, which is kind of what Mary did with her dreams, to write it down and think about it. Also, with our dreams, when people think about dreams, most people will go straight to Freud. He came along a bit later, which I'm not the biggest fan of psycho psychoanalysis, I think, it's really different. And as a modern person, I find it really hard to relate to some of the concepts and thinking in it. But essentially, once Freud started publishing on dreams, the idea which she had suggested, that dreams were kind of just processing the stuff and people you knew, he came along and was like, they've got deeper meaning they're your real desires, you've got to look into the, you know, he sort of put this this lens on dreams at some amazing secret world of what you actually want. That lasted for 50 years or so. And it wasn't this, like I read a paper published in 2012. And essentially, they said, "You know what, Mary Calkins was probably right over 100 years ago, when she said her dreams are just basically sort of a bit of junk processing people and places out of order in your brain. Yeah, that probably wasn't too far off the mark." It's funny how you just, the knowledge just get so derailed. It's hard because, you think ah, if maybe she'd been a bit more respected and more people read her work, maybe we could be at a different place right now.

AT: Ironically, Freud did cite her her dream work in his own work. And it is one of those things where it's like, why did he get all the attention?

EB: Yeah, yeah. And finally when I did look up female psychs, his daughter was was one of the prominent ones. So she did continue her father's legacy, and upon reflection, I do remember hearing about her in undergrad. So she probably was the only female psych that I did come across, her name escapes me now.

AT: Anna?

EB: Yeah, I was gonna say, Anna. So yeah, that's good enough for me. I've tried to reflect on her experience, I guess, as a woman, as a woman myself. And to be honest, it's not something I try to get too bogged down in, I think partly because I've just had the privilege of not particularly feeling like a woman in in my education, you know what I mean? I felt like, I haven't missed out on opportunities and things because of the time that I've come through. So it's not something I reflect on a lot, but my mom, in the '70s, very passionate for women and women's rights. And she's always reminding me of things that, perhaps, that are unfair. And I had a good chat with her about this, because there are things here that have actually really got under my skin in terms of, of women, and women's rights, and ultimately, the impacts that they have on society, particularly through institutions. But my mom was like, in the '70s, we were fighting for women to be equal. And, my mom had to quit education, well she didn't have to, she was very heavily suggested to quit the education department to have kids because you're not coming back. And this was in the '80s, you know, it's not the '60s, you're not coming back. And she'd go back, but she went back with way inferior superannuation package, because, you know, Dad stuck it out. And he's on the old pension. So, having kids cost her a huge career gap, obviously, but then also like, her pension, essentially, because she was told, don't do this. So, she did experience that sort of institutional disadvantage for her gender. But she looks at me now, obviously, I've done not too bad, I've got a PhD, working full time for a national government agency. But you know, I'm trying to raise kids at the same time. And she's like,, it's great that you can do all these things. But now you've got to do everything. And the whole idea of what we push for, when we were pushing for all these women's rights wasn't just for women to get paid the same. It was to share roles and share responsibilities. Not this world, where, okay, well, you work,

but you've got to work the same style as a man. And then you've also got to be a mom in your spare time. She was like, the dream was to have men having more parental responsibilities. So she feels like, I guess, when I talked to her about this, she said, it's like, women have the access, but ultimately, everything's the same, like, the way society is and what we value, and what a successful career looks like. It's all the same. And when I look at Mary Calkins, who reflected upon her experience, she's just got such a good vibe on it, because she basically, and there's quotes out there that you can find to get her actual wording. But she basically says, she's got regret for the actions of the Corporation with a capital C. So basically institutions that have disadvantaged her, but at the end of the day, she was just happy to learn. You know, that was it, like, I got to hang out with all these very knowledgeable people and discover things, right. And that for her was such a victory, because her interest wasn't in having a career. It wasn't in being glorified. It was ultimately in knowledge. Like she, she was like a knowledge nerd. She just wants to know stuff. She wants to contribute. She wants to move knowledge forward. And partly that was a passion given to her from her dad, from all reports. And I mean, his actions also suggest that and I guess that's the same for me, like my parents, both teachers, always gave me that passion for education. The difference is they didn't have to open doors for me to do that. But then, I've because I'm a researcher, I started digging around in this, why didn't she get her PhD? And there's the short answer, which is, obviously, she wasn't actually a student. So Harvard didn't recognize her and her achievements. But there was a group of professors that all gathered around and assessed her, which was a bit rogue, not approved, they were like, we're gonna risk this, they all got together, they gave her a complete PhD examination. William James said she was basically one of the most exceptional students he'd ever heard. And they wrote a letter to Harvard saying, we did this, which, you know, pretty risky, like good on them, like Harvard fired multiple people for having progressive views. So it wasn't just, if you're a bit outside of the scope, it was also if you supported those people, you're at risk. And Harvard essentially just said, noted.

AT: I do want to say she was awarded an honorary Doctor of Letters in 1909, from the University of Columbia, and a Doctorate of Laws in 1910 from Smith College, so she did get multiple doctorates, just not the one that she earned at Harvard.

EB: Yeah, so back when she was still alive, Harvard set up a special women's college called Radcliffe and Radcliffe were like, "hey, you're pretty awesome. We'd like to give you a PhD." And she essentially said, "I completely respect you, and I respect the people you're giving PhDs to. But if you do this, there's no pressure on Harvard to change." Right? And she, she didn't accept it. So she had her own opportunity to accept a PhD. And she said, Nah. So she didn't rally like she wasn't out there rallying and putting up together, you know, Change.org petitions or anything. But she took a stand. And she was very firm on it.

AT: Well, she actually, she was a suffragist, and a member of the American Civil Liberties Union and a pacifist so she was an activist, but she may have decided that there's only so much she's willing to rock the boat in academia, sort of a don't poop where you live scenario.

EB: Yes, yes. I mean, that's the polite version to what I know. Yeah. In her autobiography, she definitely, she says, and it's not it's not about issues like with the Corporation, it's, it's more around academic issues, right. So as an academic, and feel free to ask me why you would choose this career, because I ask it myself, often, you spend your whole time essentially trying to justify why you believe something and having other people shoot you down. Right? So and depending on how cutting-edge your ideas are, the more heat you get, right. So obviously, she was very passionate about self in a time when behaviorists were coming through. And so she copped a lot of fire. Right. And generally, you know, probably being a woman also got some people's backs up in general, because let's face it, there's people like that the community to this day. And, she says in her autobiography, I've had so many things that I could keep fighting for it. I've just got over it. You know what I mean? Like, you've got to pick your battles, more or less is what I read, through her very nice wording, just pick your battles and her battle was self, and definitely establishing self as an essential part of psychology. And she

did get to be the, this other funny thing, right? So you can't have a PhD. But in 1905, she's the president of the American Psychological Association. She is in charge of everyone, like representing everyone. And she did use that forum to really push her self ideas around. And I think she was voted like number 12, most influential psychologist, maybe in America? I don't know, I think there was some other layer at that time by her peers. So not by like a Google poll, because, times were different back then, by actual people that knew what she did. Wasn't a popularity contest. But you know, she was very well respected.

AT: So that was in 1903. 10 American psychologists were asked to rank their colleagues in order of merit, and yes, she ranked 12. And that was two years before she became the first woman president of the American Psychological Association. And incidentally, she was also the first woman to be president of the American Philosophical Association in 1918.

EB: And to me, it's like, you're not only the president of association, which is an achievement, but you got two. And they're two like completely different disciplines from what we have these days, she wasn't afraid to do a bit of everything. Because I think ultimately, she backed her knowledge. So despite the many challenges - there's a story online about her trying to get into the dining hall with her male colleagues at Harvard, and oh, yeah, somebody's boat got rocked big that day. They couldn't figure out how to get her to have lunch with them. It's pretty sad that the things, the challenges, and it was like, Well, you're not allowed in here, because you're a woman. And they're like, Oh, well go the Women's Hall then. And they're like, Well, you couldn't have that many men in the Women's Hall, because who knows what might happen? Yeah, it's just such a small thing. And you think that's the one that's online, right? So how much other things were there, but I guess she just was focused on the prize, she had her eye on the prize. And ultimately, the prize was actually having an impact, and getting her ideas and her thoughts out there.

And sadly, in terms of undergrad, we're not being taught her ideas. You know, self psychology is not really a big thing, like, I don't remember a unit on it. I guess it's kind of morphed a bit into personality as well. Personality is much more around the description of different types of people to me. Whereas self is more about the relationship that you have inside of you with whatever it is that you are. So I mean, the father of personality, and I use that term loosely, because now who knows what could be behind that? Gordon Allport. This was the bit that I guess made me most upset about her legacy. He wrote a book in 1937, which was his foundational piece about personality, highly cited. In the first edition, he gives lots of acknowledgement to her and her ideas around self, so lots of lots of footnotes and and citations, Mary Calkins and her work. By the third edition, she was wiped out of it. It's not nothing, and I'm like, what happened there? Do you know what I mean? Like, maybe just, he found better references like, I guess, depending on how you want what lens you want to apply to it. You could make a case either side. But it's pretty sad. So she was there. And same with Freud, right? Like, they're influencing the thinking of these people, but then it's either forgotten or just completely overwhelmed by what those people went on, to get recognized.

And so I did some investigating with Harvard. And I was like, went to their website. And they've got a write-up about how fantastic Mary Calkins is. I thought, oh, that's cool. And in their write-up, they have a citation of a person called Karen Boatwright. And she's written a whole case for why Mary Calkins should be awarded a posthumous PhD, right. She's from Kalamazoo, I think it's I just wanted to say, American, some cool places. So she's written this whole thing. And they cite it on their website. And I thought that's really weird. Like, why have they cited evidence how good this woman is? And a request to give her a PhD? Surely they've given her, you couldn't be that arrogant, right?

AT: Or they just said, "noted."

EB: Wow, history does not change at great speed it over there. So I contacted the head of the psych department at Harvard. Because you know, I just don't care. It was just like, "Hi, I'm in Australia." And I was like, "is it true, like, surely you guys gave her a PhD?" And he wrote back to me and said, "No, no, we keep

trying. But Harvard won't do." And I was like, Oh, my gosh, like, I'm a scientist, right? So I try not to filter too much through my personal lens. And I might well, either they've got a real problem with her. Or there's like something else going on? And I said, Well, why not? And essentially now, Harvard sort of come down and said, we just don't, we will not award any PhDs posthumously. I guess it's a bit of a thread that they don't want to pull at, because it's not just women. Like this is what happened. I pulled at the thread and this is where things started to go funky for me. It was gay men, it was like anyone of African descent that managed to get through uni sure did not get recognized for their studies. So there's lots of people that were never recognized for their PhD. And Boatwright sort of did a project to really rally against Harvard and say, "Come on, give this woman a PhD, just recognize her, what have you got to lose?" And that sort of happened in the 2000s. And the first response they got was actually well, that we don't have any evidence she completed the requirements of the degree. Oh, my god, how? How is this not enraging? Right? Like I said, I try not, like I don't see myself as particularly like a pusher of women's rights. And I try not to get too political about anything, but how can I not be enraged by this fact? And so that's when they wrote this whole essay about her achievements, they collated at all. And they re-presented it to the president of Harvard and said, "Look, you know, she's done it all man, here's her papers, there's an examination record." The only thing she didn't do was spent two years living on campus because she sure wasn't allowed to sleep near men, you know, like, we can't even eat dinner together. Imagine if we had to share like our rooms within like two blocks of each other. So you know, she couldn't meet that requirement. And that was the only bit she didn't rate. And they never heard back from Harvard at all, once they put together this thing. But then Harvard's gone and cited this case, for how great Mary Calkins was, and it just blows my mind. Like, it really does. I'm just like, women aside, like, let's not make this a women's issue. Let's just make this like, generally, like recognition of people issue. Oh, my god, how can you not? And then at the same time, how many honorary degrees are awarded every year? Yeah, like Tom Hanks has a Harvard degree. So it's just so inconsistent for me. It really makes you feel upset because there's a press release in the Harvard newspaper, because they cop a lot of flack for this, like, it's not news that, lots of people have been pushing. So Mary Calkins herself has had multiple campaigns where people have rallied around her, ranging from I think there was one in like, 1930 to one in 2018. So there's been lots of efforts, lots of different people that have tried time and time again, and just got told, No. But there's also been groups, so there was some gay men that got kicked out of Harvard. And there's been the same efforts around this group. And in this newspaper article about that group, Harvard basically say, "Well, yeah, it's just history, you just learn from it and go forward. You can't you can't change what's happened, you just got to learn, and then go forward." And that's kind of now I guess, their official position on posthumous degrees. Like, obviously, I didn't ask anyone at Harvard, what their official position is. But that article was published in 2010. And they still haven't recognized it. So I think they just, it's just a flat No for her and many, many others. I don't think in my lifetime, I'm gonna see them change their process. But I was a bit triggered by it. So I did dig a bit further, because I was reflecting, we do need to learn from history. But we can't change history. And yeah, she doesn't have any direct relatives. So there's no one person that's gonna benefit. Like, obviously, it benefits the community to see that people who have achieved get recognized for achievements. There's no sort of individual person that needs that to happen. But we do need to learn as a society, right? Totally on board. So, again, being a researcher, I went to the Department of Psych, I counted up the number of professors that were men and women. And I thought, wow, wonder the proportion is here. Like a dug because I just can't help myself. Like it's my natural instinct. 40% women professors in the psych department, and I thought, "Oh, it doesn't seem too bad. But what can I compare this to?" So I went to Wellesley College where Mary Calkins had set up her lab, I thought, well, there's a good comparison. They were at the forefront of including women in research and idea generation. 70% women who are professors in the psych department there, right.

AT: But I do think Wellesley's an all-female college even to this day.

EB: Yeah, but they've still got men teaching, right? So they've got 70% women as professors. And I thought, but I need better than this. So then I went to the people, the American Psychological Association. And I was



like, Okay, well, how many women versus men graduated from a doctorate in 2005, assuming that you need 15 years or so to kind of get up the ranks. 70%. I thought, you kidding me? How could that possibly be 70%? And it's exactly what is represented in the teaching department? And then Harvard's 40%. I'm like, have we learned? Like, as an institution, we're a government agency, and we're very focused on our metrics, and making sure we've got like diversity represented across multiple domains, and we're always checking our numbers. It's a fine line, because your critics will be like, Well, you can't just put somebody in a role because some feature of who they are. But ultimately, if you've got 70% of people coming out of a degree are equally qualified, that happened to be women. When you look at your metrics of like, how diverse your organization is, surely that's your bar, right? So if you wanted to be more diverse, you might have 70% women, you might have maybe less women, in some ways, because women are the dominant thing to be more diverse. You might have to include men. But we were in opposite world. We've completely opposite to that. It blows my mind. So it didn't fill me with hope. You know, like, here I am, 125 years in the future. Yeah, I've got a PhD. But how far have we come here? I don't know, I don't want to go too crazy. I don't wanna go too deep. I can't help it. I should have studied philosophy so I could articulate my ideas better.

AT: Well, let's switch gears, I am curious to talk a bit about your own work. And because I've worked in marketing for most of my career, so I'm really intrigued that, from what I understand your primary focus is on how we can use psychology to influence human behavior, ideally, using those powers for good.

EB: I'm very passionate about ideas, I guess. And I like to talk more about the concepts than the wheel turning. But much like Mary, I actually have quite a diverse pot of work that I that I'm in. And I think, partly that's the appeal of psychology to me, in hindsight. When I was like, 17 and starting up, I don't think I could have told you why I picked psychology. But in hindsight, it's got lots going on, you can work, like I said, you can work in memory, and I've done that. So I've done trials with kids, looking at how different breakfasts impacts that memory, you can look at personality, I've done that. I've tried to make my own little tool to quantify different diet type. So, when you start a diet, what do you like, what type do you fit? And then I guess more recently, I want to do something. And maybe this is just like something that happens at a certain point in your career where you think, I want to see something a bit more tangible. Rather than a tool or, or some knowledge in a paper, I want to help people be better, right? And for me, I'm pretty narrow in my thinking, because I guess I don't want to take people who are not interested and help them be better. Like, I'm kind of like, oh, that might be a bit too hard. But there's so many people out there that do want to be better, right? They want to live better lives, they want to be healthier, they want to be fitter, they want to feel better. And they don't know how to do it. And there's so many barriers, and it's just so hard like, man, I've done radio interviews, and I've had a guy say to me, but weight loss is easy, right? Like we know what we need to do. Like, literally, oh my god, like I basically just stopped. The conversation went a bit more pointed from that point and ended very quickly. But I was just like, anyone who's actually tried to eat differently, would know it's not easy. As I said, I pulled him up straight then and there and the interview had quickly shut down. Because he saw that I was getting a bit fiery.

AT: I think you see that with all all kinds of privilege, like, oh, it's not that hard to get an education or it's not that hard to eat better. And I feel like being in a privileged position, which I have a lot of privileges. But I think it makes it a lot easier for that person to assume that this is easy for me, therefore, it's easy for everyone else, because I don't recognize the barriers that other people are facing. They don't realize how complex it is.

EB: Definitely. To be honest, I'm like that with knowledge. Like, to me, that's my privilege that my parents have valued knowledge. And so to me, it's like, of course, you want to know things. And I found it really hard to understand other people, they just don't even think about things. Like, partly, it's envy as well, because I'm like, oh, things would be a lot easier if I thought a lot less sometimes. But how do you not want to know more about these things. And that's like, my privileged lens that I see. And I think as you get further in your career, you get more disconnected from like most people. And you just surround yourself with all these other PhDs, and you just

get in this little bubble of like, all these people that use fancy words and fancy concepts and like shooting each other down, like, there's a lot of ego out there, too. And you just get used to it, and, and you lose sight of why you're doing it. And so that, for me is I guess how I see privilege in my own world. And my husband definitely comes from different world than me. And often I have him to kind of remind me, you know, there are different places in the world. And I guess, you know, being a woman as much as I don't want to admit it. As you know, I've progressed through my life, and particularly when I got a husband, because I got always kind of just being single and never really saw you myself as a woman trying to do woman things, I was just Emily trying to Emily things. Then I get a husband. And then I could see really firsthand how his experience was different to my experience. I'd never really had to face that as an individual, because I never really filtered through that lens. Because my parents, like I said, my mom, she went through the feminist, they didn't give me Barbies, they were very careful to make sure that I had a very, whatever you want to do, we're not going to force you down one path or the other. My sister loves makeup and clothes. I like Lego, right? I was allowed to be who I want to be. And so I didn't ever really have this hang-up about that. Then I get this guy that's hanging around me all the time. And I'm seeing the way he talks to people, I'm seeing the way people talk to him, and then he sees that too. Like, it wasn't just me, because he was similar to me. And he's like, "Oh, my God, really? That person just said that to you." Because he really respects me and what I've achieved because he didn't come from a family that valued education, and he fought through it and eventually got an associate degree, but it took a lot of work for him. He was working full time. And he works so much harder to get a lower level of degree than I did to get my PhD. So I respect him heaps for that, but he respects where I got to, too. And so he can't believe the way sometimes people talk to me in the community because I look pretty young firstly, and I'm pretty casual. And so people just assume.

And then you have kids, oh my god, you just go down a layer. You walk around the street with a four year old and five year old hanging off you, tugging on various body parts that shouldn't be touched in public. And you go down a layer. People assume you know nothing. You get talked to in a very specific way. And because I work, we have flexible work arrangements and I'm fractional. I'm out and about on a Wednesday morning with my daughter who's not quite at reception yet. So people that just assume oh, you're just a stay at home mom, you know nothing about the world. I'm like, "you know what, actually, I'm fairly well respected, you know, have international people talking to me about my ideas. I don't actually need you to care about me because I've got a pretty healthy ego." But at the same time, it's not nice to be to just go about your life and be treated that way. And my husband, like we had someone come out. I had my own house. He had his own house. We had someone come out quote for veranda at my house. And it was just me and the guy rocks up and he's like, trying to talk me through these complicated concepts of you know, putting up some posts and a roof because you know, whew! Might be a bit much for me. And then Brody rocked up, my husband, he immediately just turned to him and continued the whole conversation with him. And I was like, dead to him from that point on and I was like, ah, you know, this isn't his house, like you just lost a customer, right? And I rang up his employer, and I was like, you really gotta work for that, because you lost the customer purely because that guy was just so rude to me as a human being. Not even just as a woman, just as a human being mate. Treat me with some respect here. But the other thing that I think's funny, is I ride motorbikes. People come to my house, they see see my motorbikes, right. And my husband actually had a stroke, and his right side of his body doesn't work. So every time you meet someone, they go to shake his hand, especially men, and he can't get his hand out, because it doesn't work well. So straight off, every guy that he meets knows that he's disabled. And yet, they go out the back, and they go, Oh, your motorbikes, mate? Like, the guy can't even use one side of his body. And you know that, and yet he's more likely to be riding a motorbike than me. It's just nuts. And like I said, I was never really aware of it until I had a point of reference. That's what science is all about, right. Like, we have to find these points of reference, make our comparisons and make our experiences. There's a current, but it's like 15 years old now, theory around, you have resources, you know, you have so much resource. And you wear out. We call it ego depletion in psych. In the '80s, I thought it was called willpower, but you know, it's essentially the idea that cognitively and mentally you can only take so much on. And then once that's run out, you start to get grumpy, you can't maintain new things. So there's a lot of thinking around that now, and how we

can use that to help people stay on track, so freeing up some of the burden of learning new behaviors, in ways that just make it simpler for people, but when it comes to eating, yes, that's a challenge. I think I'm just gonna spend the rest of my life trying to make that work. Because eating is just so complicated, you know, you have to do it. And I think unlike smoking, or drinking, or wearing sunscreen, it's just like some one little thing that you do. Eating, like, you have to do it three times a day, or more or less, and you're gonna navigate such a complicated environment. So I think I'll be busy.

AT: And there's so many factors when you're looking at, like, what all you're putting into your body because it might be your iron is low, so you should eat more red meat, but your cholesterol is high, so you shouldn't eat any red meat. Like, pick one!

EB: Yeah, but then also like, oh, and I actually, I really care about the environment. I've heard that red meat has a really big footprint. Is that true? You know what I mean? But then you know, red meat's not so bad if you eat the right quantity, like it's just like impossible, but I don't care how smart you are. And, maybe AI will solve the problem and tell us what's right. But my hopes are not high. You know, because those systems are made by people and if we don't know what we're doing, I'm not confident that data is the solution to our problem. And I think we do need to go back to our roots. And we do need to go back without thinking of people in ways that isn't purely number base. There is a bit of philosophy for me that we need to navigate this data rich world.

AT: Join us next time on the Infinite Women podcast and remember, well-behaved women rarely make history