2022 Spence Award Mini Episode: Patricia Lockwood and the Foundations of Social Learning

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The winners of the 2022 APS Janet Taylor Spence Award for Transformative Early Career Contributions represent some of the brightest and most innovative young psychological scientists in the world. In a series of mini-episodes, *Under the Cortex* talks with each winner about their research and goals.

Today we hear from Patricia Lockwood (University of Birmingham), who is researching the foundations of social learning and decision-making throughout life.

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Transcript:

Charles Blue (00:00)

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This is Charles Blue with the Association for Psychological Science with another in our series of miniepisodes of *Under the Cortex*. This series presents the compelling and innovative research of our 2022 recipients of the Janet Taylor Spence Award for Transformative Early Career Contributions. Today I'm talking with Pat Lockwood with Birmingham University. Thank you for joining me.

Patricia Lockwood (00:36)

Thanks so much for the invitation to speak to you today.

Charles Blue (00:40)

Can you tell us a little bit about your current field of research? What are you most interested in looking into? What are you trying to solve?

Patricia Lockwood (00:49)

What we're trying to solve is to understand the cognitive, computational and neural mechanisms that determine how we learn and decide in social situations. And one thing that we're really interested in is how these processes change across the lifespan. So how they might be different from when we're a young adult to when we enter older age.

Charles Blue (01:12)

And what have you been able to determine that researchers didn't know prior to your research?

Patricia Lockwood (01:19)

One of the things we've discovered recently is that something called prosocial behavior, so decisions that we make that help other people so they have a direct benefit for someone else. These processes seem to maybe change a bit, or at least they differ as we get older. And I think this is really interesting because most research on aging had focused on nonsocial differences or changes. So we know lots of things happen just with the normal process of aging. So things like our working memory might get a bit worse or our physical abilities might decline a little bit. But we didn't know so much about what happens to our social behavior. So we've been interested in looking at what happens to our social behavior and trying to answer the question of whether older people become more prosocial as they get older.

Charles Blue (02:08)

And what was the result of this research? What did you take away or actually what most excites you about the findings you've had so far?

Patricia Lockwood (02:17)

One of the things we found recently was we were lucky enough to be part of the global collaboration that was looking at the impact of the pandemic on social and moral psychology across the world. And we thought this is a great opportunity to be able to look at the effects of age in this dataset. And what we saw was that actually in most countries around the world, this link between age and prosocial behavior was there. So kind of wherever you are in the world, the older people were, the more prosocial they seemed to be in terms of how much money they were willing to donate to a charity helping victims of coronavirus. And we thought that was really exciting because we'd seen in the lab in a few of our more precise, longer experiments that older people seem to be prosocial, but then we kind of replicated that effect around the world have there.

Charles Blue (03:06)

Have there been other concrete examples of this increased prosocial behavior in older people? Are there other examples that would be particularly striking?

Patricia Lockwood (03:16)

Yes. In our lab studies, what we saw. So we have this task where we can very precisely measure how willing people are to put in physical effort to help other people. And we tested this in a large number of younger adults, and we saw that people are willing to put in physical effort to help others, but they seem to be less willing to do so than they are for themselves. And when we tested this in older adults, it was quite interesting because we found that older adults were more willing to put in physical effort than younger adults when it helped someone else. And this is kind of despite, as I mentioned, maybe you think that kind of physical abilities might change as you get older, but actually the older people in the lab seem to be more willing to put in effort to help others.

Charles Blue (04:01)

Well, that gives me something else to look forward to in the next few decades of my life. Actually looking forward, what are the current hurdles, what are the areas that are not really yet well defined or the major challenges in your field that you would like to see address that would help advance this research?

Patricia Lockwood (04:21)

I believe one of the main challenges is linking up these different levels of explanation. So I'm really interested in what happens in the brain, but when you study something like prosocial behavior, you have to be able to link what's happening in people's behavior to what's happening in the brain. And recently there's been some statistical approaches to do this, so we can build these computational models of behavior, and we can also use these what's known as multivariate techniques. And what's really cool about both of these approaches is we can actually link people's behavior directly to the brain, so we can test what people do on a task and see the signals that happen in response to that. And that's quite different from when we were looking at the brain without these statistical approaches, because you just have to subtract activity from two conditions so you could show a part of the brain responded more to faces compared to houses, but you can't really do that to link the behavior. So I think some of these statistical approaches that sometimes come from other fields are really influencing social cognition and helping us get a handle on linking brain and behavior.

Patricia Lockwood (05:28)

I think the second challenge related to that is whether we have good theories of kind of how social learning and decision-making works and whether it's different from how we learn and decide for ourselves. And I think solving that challenge is really important. If we want to increase prosocial behaviors in people or treat disorders of social cognition, we need to know, do we just enhance learning and decision making in general, or is there something quite specific or special about social behavior, which is what we need to change.

Charles Blue (05:59)

Well, this is Charles Blue and I would like to thank my guest, Pat Lockwood for her time and discussion on her current research and congratulate you on receiving the 2022 Spence Award by APS. Thank you for joining me.

Patricia Lockwood (06:13)

Thank you very much.

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