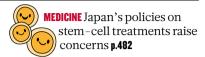
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Millions of people participated in youth-led climate protests on 20 September.

SOCIETY

Why the world is watching young climate activists

Researchers break down why the movement and its message are gaining ground.

BY EMMA MARRIS

rom Jakarta to New York City, children and teenagers are walking out of class and marching in the streets to demand action on climate change. And the world is taking notice. Communications researchers say these young climate activists are using their moral authority as children, and their social-media savvy, to surf a rising tide of adult concern.

Jamie Margolin founded the protest group Zero Hour in Seattle, Washington, in 2017, when she was just 15. Half a world away, 15-year-old Greta Thunberg started skipping school in 2018 to strike for climate action outside the Swedish parliament in Stockholm. The movement quickly went global. An estimated 1.6 million kids in 125 countries hit the streets for a protest in mid-March. That was dwarfed by a global youth-led demonstration

on 20 September that was probably the largest climate protest ever.

Young people have been talking about climate change for decades. But the latest generation of protesters is louder and more coordinated than its predecessors, says Dana Fisher, a sociologist at the University of Maryland in College Park who studies activism. The movement's visibility on social media and in the press has created a feedback

loop. "Young people are getting so much attention that it draws more young people into the movement," she says.

Thunberg, now 16, was inspired to start her weekly climate strikes by students in Parkland, Florida, who organized a national school walkout in 2018 to fight for stricter gun laws after a mass shooting at their high school left 17 people dead. Earlier this month she made headlines worldwide when she sailed to New York City in a solar-powered yacht to attend the United Nations climate summit. "It feels like we are at a breaking point," she said.

Thunberg and other young climate campaigners aren't conventional, tree-hugging environmentalists, says Harriet Thew, an environmental social scientist at the University of Leeds, UK. Many see tackling climate change as a matter of global justice — a framing that Thew says is more effective than a purely environmental message.

"More and more, they are talking about the problems for people and really recognizing that human–environment connection," she says. Their message isn't about saving the rainforest or saving whales; it is about saving the most vulnerable people on Earth.

A MOVEMENT COMES OF AGE

Oladosu Adenike, a 25-year-old protester in Abuja, Nigeria, says that she can already see the effects of global warming. "Internally displaced peoples, farmer–herdsmen clashes, insecurity — all driven by climate change," she says. "Also the increase in food price, floods sweeping away farmers' land, droughts affecting the yield of crops, and excessive rainfall."

Then there is 22-year-old Vanessa Nakate, who spends 66 hours a week selling solar batteries in her father's shop in Kampala, Uganda. She worries about the effects of climate change on the rain-fed agriculture that supports most Ugandans. Although Nakate often protests alone, social media connects her to activists around the world and amplifies their common

message. "The older generation messed things up," she says. "We are doing the clean up."

Adults are listening. Media around the world covered Thunberg's journey across the Atlantic. And UN Secretary General António Guterres has endorsed the school strikes, saying: "My generation has failed to respond properly to the dramatic challenge of climate change. This is deeply felt by young people. No wonder they are angry."

Connie Roser-Renouf, a climate-communication researcher at George Mason University in Fairfax, Virginia, says that data from a long-running survey of US adults conducted nearly every year since 2008 reveal an audience that has grown more receptive to the strikers' message. "The adult population has been getting increasingly concerned, and that has been trending since 2015," she says.

Some of their concern is related to natural disasters thought to be exacerbated by climate change — such as the record-breaking forest fires in the western United States last year, and Hurricane Maria, which slammed into Puerto Rico in September 2017.

But Roser-Renouf says that about onequarter of the adults in the 2018 survey said that the most important reason to act on climate change was "to provide a better life for our children and grandchildren".

Research has revealed a similar pattern in other countries, says Christopher Shaw, a communications specialist at Climate Outreach in Oxford, UK. "We find again and again that it is the impacts on children and grandchildren that are of great concern," he says.

A 2016 survey of 1,860 people in the United Kingdom found that 61% were willing to pay up to £20 (US\$25) a month to prevent climate-change related deaths in 2050, 2080 and 2115 (H. Graham *et al. Public Health* **174**, 110–117; 2019). And participants in a 2017 study conducted in Lisbon and in Adelaide, Australia, were willing to spend just as much money to prevent negative climate impacts on future

generations as they were to protect themselves (L. Everuss *et al. J. Sociol.* **53**, 334–350; 2017).

But adults don't just see teens and young adults as victims who need to be protected from climate change. Thew's research on the role of youth participants (those aged 16 to 24 years) at UN climate negotiations has revealed that adults perceive these activists as having greater moral integrity than others attending the talks — "because they are not being paid to be there", she says.

SPEAKING TRUTH TO POWER

Because young climate protesters don't represent someone else's agenda, their message is strikingly direct and unvarnished. "They can say a lot of things that older activists can't say," says Matthew Nisbet, who studies environmental communication at Northeastern University in Boston, Massachusetts. "They don't have careers yet. They don't have filters that adults might have."

He points to videos online of teen climate protesters confronting members of the US Congress or otherwise taking adults to task. "Maybe you are simply not mature enough to tell it like it is," Thunberg says to the French National Assembly in Paris, in a video with 3.7 million views on Facebook. "Even that burden you leave to us children."

"They are being viewed millions of times and then they end up being embedded in news stories," says Nisbet. "It is drama, it is novelty, it is authenticity, and it is catastrophe."

Still to be seen is whether the movement's participants maintain their enthusiasm as they grow older. The demands of finding employment in a difficult global economy might leave less time for activism, Shaw says. Teens have more support and time to protest. "Your dinner is still on the table at home," he says.

But when the current youth leaders grow up, a new cohort of climate campaigners might be ready to rise. Some of today's activists are as young as 11.

ACTIVISM

Scientists join climate strikes

Biggest-ever rally against global warming drew millions of protesters worldwide.

BY QUIRIN SCHIERMEIER, KATE ATKINSON, EMILIANO RODRÍGUEZ MEGA, T. V. PADMA, EMMA STOYE, JEFF TOLLEFSON & ALEXANDRA WITZE

Scientists around the world joined the millions of people who walked out of workplaces on 20 September to urge stronger action on climate change. The event, inspired by Swedish activist Greta Thunberg who began a 'school strike for climate' one year

ago, took place as government and business leaders arrived in New York City for the United Nations Climate Summit this week.

Nature spoke with striking scientists worldwide about their motives and expectations.

MEXICO CITY

Instead of carrying a sign, like most climate strikers in Mexico City, Ana Wegier was holding her three-year-old son. "I believe it's super important for him to grow up participating in these events," she says. As a population geneticist at the Botanical Garden of the National Autonomous University of Mexico in Mexico City, Wegier is most worried about the "silent" consequences of a warmer planet. These include a reduction in the genetic diversity of crops and plants on which millions of people depend. "What we're losing is the opportunity to survive many of the changes to come," she says.