Hot streaks are a familiar phenomenon in sports. Athletes often have stretches where they perform well above the norm for their career, sometimes spectacularly so. But what about nonathletes? Do people in other fields have hot streaks in their careers?

New research my colleagues and I conducted into the careers of about 30,000 artists, film directors and scientists suggests that the answer is yes, at least for those careers. And it's likely that hot streaks occur in other creative, innovative professions like music and entrepreneurship.

These hot streaks tend to last for four or five years, and some people have more than one. We also found that a hot streak can happen at any point, even in the final years of a career—contradicting the conventional view that people in many fields are likely to do their best work in their 30s or 40s, late enough for them to have built up a solid base of experience but early enough for them to still have the energy required to sustain high productivity.

That suggests that, although older people are less likely to produce breakthroughs than their younger counterparts, this isn't because age and creativity are intertwined. It's simply because not enough people keep plugging along late in their careers. If we keep producing, our own hot streak may still be ahead, just out of sight.

In the research—which I conducted with my student Lu Liu and other collaborators—we used the auction prices of artists' works, the IMDB.com ratings of directors' films and the number of citations of scientists' published work as measures of quality and impact. We summarized our findings in the research paper and in a WSJ article. The research has implications for leaders in business and other creative professions, as it suggests that people should keep pushing even into later life.
For each field we studied, about 90% of individuals had at least one hot streak, defined as high-impact works clustered together in sequence.

Director Peter Jackson’s “The Lord of the Rings” series represented a hot streak, as did George Lucas’s early “Star Wars” films. Other notable hot streaks include Albert Einstein’s “miracle year” of 1905, which included the unveiling of his famous $E=mc^2$ equation; the “drip period” for painter Jackson Pollock; and the period following Vincent van Gogh’s move to the South of France in 1888, when he produced renowned works including “Starry Night Over the Rhone” and “The Yellow House.”

The timing of hot streaks is random, but one surprise in our research was that hot streaks weren’t associated with greater productivity: People don’t produce more during hot streaks, but what they create is substantially better than their remaining body of work.

Our research is only the beginning. As more data on individual careers becomes available, it may help us identify the drivers and triggers for hot streaks, which would then help us answer a range of new questions. For example, can we anticipate the start and the end of a hot streak? Can we create an environment to facilitate and promote the onset of a hot streak, and to extend it when it emerges? For someone who has had a hot streak, can we treat it as an indication of their potential, and think of ways to help them realize that potential again?

At this point, the only certainty is this: A sure way to prevent a hot streak is to stop producing altogether. I, for one, look forward to the day when my hot streak arrives.

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