sciendo

CREATIVITY

Vol. 6, Issue 1, 2019

Theories – Research – Applications

A Golden Age for Creativity Research: Interview with Dean Keith Simonton

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ARTICLE INFO

Keywords:
Dean Keith Simonton
Interview
Researcher

Article history:
Received 04 June 2019
Received in revised form 08 June 2019
Accepted 23 June 2019

ISSN: 2354-0036
DOI: 10.1515/ctra-2019-0009

ABSTRACT

In the interview with Dean Keith Simonton, one of most prolific creativity researchers, we discuss his career, main areas of research interest, chosen research methods and share his thoughts about the future of research on creativity and effectiveness in scientific work.

Dean Keith Simonton is Distinguished Professor Emeritus of Psychology at the University of California, Davis. His more than 500 single-authored publications focus on genius, creativity, aesthetics, and leadership. Honors include the William James Book Award, the George A. Miller Outstanding Article Award, the Theoretical Innovation Prize in Personality and Social Psychology, the Sir Francis Galton Award for Outstanding Contributions to the Study of Creativity, the Rudolf Arnheim Award for Outstanding Contributions to Psychology and the Arts, the E. Paul Torrance Award for Creativity, and three Mensa Awards for Excellence in Research. In 2018 MIT Press published his *The Genius Checklist*.

The interview opens a new cycle of structured interviews with creativity researchers who contribute eminently to the contemporary scientific understanding of creativity.

Izabela Lebuda: *Please tell me about your professional career; how it happened that among many areas of psychology you took up the psychology of creativity?*

Dean Keith Simonton: I actually started out as a chemistry major in college. But that major was pursued in a liberal arts college that required that all students take a two-year long

course in the history of civilization. This team-taught course covered politics, philosophy, science, literature, music, and the visual arts, and it spanned from the ancient Sumerians to the 1960s. Emphasis was placed on primary sources, so that we read such books as *The Epic of Gilgamesh*, Murasaki Shikibu's *The Tale of Genji*, and *The Autobiography of Malcolm X*. During those two years, students were required to keep a journal recording their thoughts about the material. That requirement led to cross-talk between the history of civilization and the mathematics and science courses I was taking simultaneously. So many of my journal entries would deal with how to quantify certain concepts or to identify any "laws of history." To illustrate the former, here's an entry inspired by the observation that the figures who "made history" had attained various degrees of "fame" (or infamy):

> What is fame? Qualitatively it is name. But how can we measure it quantitatively? Basically, fame is directly proportional to the occurrence of name; that is, $F = n(N)$. To determine how famous a man is, all we have to do is count the number of times his name appears in writing and speech, or more pragmatically, in writing only. Then the person may be placed on a fame-scale and compared, quantitatively with others. (Simonton, 1990, p. 96)

I penned that entry on October 3rd, 1966, as an 18-year old in the first quarter of my first year as a college student. Little did I know at the time that the assessment of historic creativity and leadership had already been invented using historiometric measures of achieved eminence (e.g., Cox, 1926). I also had no idea that anybody besides historians studied creativity or leadership of the magnitude of genuine genius.

Then in my second year I managed to squeeze in an elective: introductory psychology! I then learned that genius, creativity, and leadership were actually topics investigated by psychologists. For example, the course textbook (Hilgard & Atkinson, 1967) treated the following research: (a) Terman's (1925-1959) *Genetic Studies of Genius*, including a discussion in the last volume about whether his intellectually gifted children had grown up to become eminent creators and leaders; (b) the extensive psychometric studies of eminent writers, architects, and mathematicians conducted at the Institute for Personality Assessment and Research at UC Berkeley (e.g., MacKinnon, 1965); and (c) the historiometric investigations that Lehman (1953) carried out regarding the relation between age and history-making achievement in almost every domain in which a person can attain eminence, including science, philosophy, literature, the visual arts, and music composition.

So I eventually decided to switch from chemistry to psychology, albeit the final change wasn't complete until the end of my third year – just in time to have the right major when I applied for graduate school. By then I had decided that I would apply to a so-

cial psychology program because creative genius, my primary focus, had a prominent sociocultural aspect. Indeed, I entered the program in Harvard's Department of Social Relations, which then included cultural anthropology and sociology as well as social, personality, and developmental psychology. There I was able to integrate archival data and econometric analyses to produce a doctoral dissertation that represented the first characteristic example of my future research program (Simonton, 1975). By tabulating more than 5,000 eminent creators in Western civilization into generational time series, I could assess the extent to which aggregate fluctuations in creative activity were contingent on such factors as role-model availability, political fragmentation, civil disturbances, and warfare.

Izabela Lebuda: *Could you tell the main areas of your research interests and chosen research method in the psychology of creativity? If yes, how did they change over your career?*

Dean Keith Simonton: I should make it clear from the outset that my research program has always been both substantively and methodologically diverse. On the substantive side, and even if we ignore all of my extensive research on leadership (especially on US presidents), I have treated a wide range of topics regarding the cognitive, personality, developmental, and social aspects of creativity. Although my emphasis has been on creative genius in the arts and sciences, I have also ventured into more everyday creativity. This range is also reflected in the diversity of methods I have employed over the years. Even if the bulk of my empirical studies depend on historiometric methods, including the computerized content analysis of creative products, I have also published mathematical models, computer simulations, laboratory experiments, psychometric assessments, meta-analyses, and even single-case studies. Nonetheless, certain issues have generated multiple publications spread over two decades or more. These long-term projects include: (a) the relative impact of nature and nurture in the development of creative potential (empirical, mathematical, and meta-analytical inquiries); (b) the relation between age and creative productivity (including career landmarks); (c) multiple discovery and invention (empirical studies and combinatorial models); (d) content analyses of classical music, poetry, plays, and short stories (especially Shakespeare and Beethoven); (e) achieved eminence in psychological science (citations, content analyses, and biographical data); (f) the sociocultural context of creative activity (generational time-series analyses of Western, Islamic, Chinese, and Japanese civilizations), and (g) Campbell's (1960) blind-variation and selective-retention (BVSR) model of creativity (empirical studies, mathematical models, and computer simulations). And that list ignores several endeavors that for various reasons lasted less than two decades, such as 16 journal articles and two books exclusively devoted to cinematic creativity and aesthetics that were published over a dozen years.

Izabela Lebuda: *Why do you think it's worth researching creativity?*

Dean Keith Simonton: This question is an easy one to answer because not long ago I gave my response to a target article on this subject by James C. Kaufman (2018) that was published in this very journal (Simonton, 2018). Of course, I cheated in my answer. Because I mostly study Big-C creators who have made substantial contributions, direct or indirect, to the world in which all of us live, it's too easy to just point to the signs of their creativity that surround us – even if we all too often take their enduring gifts for granted. Once I gave a live radio interview in a large auditorium with a huge audience. When this issue was raised, I just started pointing to everything in the hall that would simply vanish until there was practically nothing left – except a bunch of naked people wondering what just happened! Admittedly, that argument doesn't immediately justify research on everyday creativity. Yet I believe that the difference between little-c and Big-C creativity is more quantitative than qualitative. We certainly have to understand the former to completely comprehend the latter.

Izabela Lebuda: *What currently do you see the most crucial and most fascinating areas of research on creativity?*

Dean Keith Simonton: We live in exciting times! When I took over the editorship of the *Journal of Creative Behavior* back in 1993, it was the only vehicle exclusively devoted to the topic. Now not only have the number of publication venues proliferated, but so has the scope of inquiry dramatically grown. Just look at recent advances in the neuroscience of creativity, for example (Jung & Vartanian, 2018). Or the increased interest in the sociocultural side of the phenomenon (Glăveanu et al., in press). Even old topics have received renewed attention using updated conceptions, such as the ancient mad-genius controversy (Simonton, 2019a). It's truly a Golden Age for creativity research!

Izabela Lebuda: *What do you think, the direction in which the psychology of creativity will develop?*

Dean Keith Simonton: I'm not a prophet, but I do have wishes for the future. And my main hope for the psychology of creativity is that it acquire more theoretical coherence. Current research is all over the place, with a more or less mix and match orientation. That means that it's not always easy to figure out why a particular empirical finding would even be important. Perhaps creativity research is not yet ready for a unified theory of everything (creative), yet it has been an active subject for more than a half century. So when will it be ready? This problem is why I have devoted so much effort to developing BVSR into just such a theoretical framework, using mathematical models, computer simulations, and empirical research to produce what I consider a combinatorial model with both pre-

dictive precision and explanatory breadth (e.g., Simonton, 2010). Not too many theories out there that can simultaneously account for how creative productivity varies across the career and for why two or more scientists will independently make the same discovery. I strongly believe that any alternative theory that can handle these and other relevant phenomena must be isomorphic with my own. It might replace BVSR with "trial and error," "generate and test," "illumination and verification," or some other phrase, but the formal equations themselves would be borrowed with mere modifications from my own (e.g., Tsao, Ting, & Johnson, in press). The way science works, that's actually a sign of scientific progress. And who does not want the psychology of creativity to become a genuine science?

Izabela Lebuda: *You are the one of the most productive creativity psychologists. Can you share your advice, principles of effectiveness in scientific work?*

Dean Keith Simonton: We already know a great deal about what makes scientists in general, and psychologists in particular, highly productive (Simonton, 2019b). Perhaps the single most crucial recommendation entails a paradox. On the one hand, a rather specialized expertise is required to make a substantial contribution to any domain. There's past research to learn and difficult techniques to master, plus there's always new results and methods to keep up on. There's no room for amateurs or dilettantes. On the other hand, highly creative people, including scientists, have wide interests, such as artistic, literary, and musical hobbies (Root-Bernstein et al., 2008). These tendencies are often subsumed under the Openness to Experience dimension of the Big-Five Factor Model (McCrae & Greenberg, 2014). Even an Albert Einstein would take time off from his laborious mathematical calculations to play his violin, sail a boat, or read classics. Although this really might look like a delicate balancing act, it really isn't. Even Big-C creators cannot be continuously creative. They will often encounter obstacles along the way to solving some problem, and thus enter the proverbial incubation period. That marks a fine time for diversion. Naturally, the creative scientist also has the option of switching to another problem. And that's ok, too. Having the cognitive flexibility not to persist when persistence doesn't pay, that's the key. That's why creative productivity is associated with engagement in multiple projects (Simonton, 2004). Avocational activities are just included among them. Even a simple walk in the park can stimulate creativity.

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