Interview (1):

Dean Keith Simonton

Taisir Subhi Yamin

The International Centre for Innovation in Education (ICIE)

Dr. Dean Keith Simonton is a Distinguished Professor Emeritus of Psychology at the University of California-Davis. Dr. Simonton’s research specialty areas are in the study of human intelligence, the psychology of science, giftedness, and creativity. His well-known and influential books include Great Psychologists and their Times, Greatness: Who Makes History and Why, and Creativity in Science. In this interview with Dr. Taisir Yamin, Dean Keith Simonton illuminates his perspectives on creativity, greatness, and intelligence. He shares his own personal journey of learning.

TSY: Can you explain what motivated you to enter the field of gifted and talented education?

DKS: My research interests were ultimately rooted way back in early elementary school, when my parents purchased a set of encyclopedias specifically designed for K-12 use. I quickly became enthralled by these volumes, just loving to browse through the well-illustrated pages. I eventually became fascinated with the articles about famous historical figures, especially artistic and scientific creators and leaders both political and military. In fact, this fascination evolved into a lifelong curiosity, albeit nowadays I’m far more likely to rely on Wikipedia to get quick access to the information sought.
Yet it wasn’t until I got to college that I started thinking that this avocation might be converted into a vocation. Although I started as a chemistry major, I took an introductory psychology course in my second year. Then I discovered that psychologists were already studying topics closely related to the attainment of eminence as a creator or leader. For example, I learned about Lewis M. Terman’s (1925-1959) classic longitudinal study of intellectually gifted children, including the final volume examining whether they grew up to become adult geniuses. In addition, I was intrigued by Harvey C. Lehman’s (1953) extensive inquiries into the relation between age and high achievement in diverse domains of creativity, leadership, business, and sports. Hence, by the end of my junior year I switched to a psychology major, thinking that I might become a scientist dedicated to understanding exceptional accomplishments.
TSY: When did you start working in this field?

DKS:
Right away! Because I was soon chosen as an Occidental College Scholar, I was permitted to carry out independent research projects. One such project was an attempted theoretical integration of intuitive versus analytical thinking that was about 10 years later published as a monograph (Simonton, 1980). Even so, I was struggling to find my preferred approach, an approach that would enable me to address the key questions that sparked my curiosity. Even after entering graduate school, in the how-defunct Department of Social Relations at Harvard University, I was floundering. As a case in point, the laboratory experiment that I conducted for my master’s thesis just didn’t meet my needs. I didn’t want to use college student participants as proxies for the geniuses who actually attracted me.

Then, happily, I discovered that historiometric methods would enable me to study some of the greatest creators and leaders of history, and to do so in a rigorous and objective manner. I would just collect extensive biographical and historical data on a well-defined sample of luminaries, convert the qualitative information into quantitative measures, subject the latter to sophisticated statistical analyses or mathematical models, and thus address the substantive questions that strike my fancy. Notice how my love of reading biographies now became an integral part of initial data collection!

TSY: What kind of major challenges did you face?

DKS:
I’m glad you asked, because that was the hard part. At that time, hardly anybody used historiometric methods, and certainly not anybody who conducted top-notch research. Indeed, one of my mentors warned me that such research would not be publishable in any reputable journal, specifically mentioning the Journal of Personality and Social Psychology (JPSP), then considered the most prestigious publication vehicle for my specialty. Consequently, my proposed research program was merely a form of academic suicide. If I couldn't publish in the leading journals, I certainly wouldn’t land a position at a highly-ranked research university, and therefore I would be unable to do much research anyway.

Imagine my advisor’s surprise when he learned that the core chapter of my doctoral dissertation was actually published in that very journal (Simonton, 1975). The very next year saw two additional publications appear in JPSP, including one based on Cox’s (1926) historiometric study of 301 geniuses that constituted the second volume in Terman’s (1925-1959) Genetic Studies of Genius (viz. Simonton, 1976). Then in 1977, I published two JPSP articles back to back … well, I could go on and on

All this is not to say that I’m now home free. Many investigators in psychology still believe that research samples should consist of more everyday participants, such as K-12 and college students. No doubt much is gained by such a strategy. Yet if your primary focus is on those rare personalities who have made a lasting impression on human civilization, historiometric research still provides the optimal path (Simonton, 2014b).

TSY: How did you become involved internationally?

DKS:
A few years after I started publication, I began to receive invitations to participate in conferences elsewhere in the world. The first such conference was held in 1979 at WZB Berlin Social Science Center, where I delivered a talk on “Cultural Creativity and Political Leadership: The Lessons of Historiometry” (published as Simonton, 1985a). I can only speculate that my historiometric research featured two assets that might appeal to an international audience.
First, the subjects who made up my samples represented multiple nationalities throughout the world. For instance, the first publication to come out of my doctoral dissertation studied the creative peaks of 420 writers who define the major literary traditions, from antiquity to modernity and from Western to Eastern civilizations (Simonton, 1975a). Indeed, because I have a strong interest in cross-cultural research, many of my findings have been replicated across diverse civilizations (Simonton & Ting, 2010). For example, the impact of “role-model availability” on creative development has been assessed in Western, Islamic, Chinese, and Japanese civilizations (Simonton, 2018b).

Second, historiometric inquiries permit the investigator to address some of the “big questions” that have circulated for centuries, if not millennia. For instance, “Is genius born or made?” The very first historiometric monograph ever published was specifically directed at this issue (Galton, 1869). Even when these key questions can be answered using more standard methods, historiometric approaches provide a unique perspective that would be unavailable otherwise. This potential is seen in the second volume of Terman (1925-1959). Although all of the other five volumes were devoted to a longitudinal and psychometric study of high-IQ children, Cox’s (1926) alone constituted a retrospective and historiometric study of whether historic geniuses would have been considered intellectually gifted children (Simonton, in press). Although partially reinforcing the longitudinal results, her findings also added insights unavailable otherwise (for details, see Simonton, 2016b). Adult geniuses and gifted children are not necessarily cut from the same cloth.

Whatever the reason for my international influence, it didn’t take long for me to receive international honors. For instance, in 1996 I received the Sir Francis Galton Award for Outstanding Contributions to the Study of Creativity from the International Association for Empirical Aesthetics.

**TSY: What are your most significant accomplishments and contributions?**

**DKS:**

Perhaps reword: This is a difficult question to answer, because of the diversity in topics and methods I have included in my research. For example, I have published not just historiometric inquiries but also laboratory experiments, mathematical models, computer simulations, psychometric investigations, meta-analyses, single-case studies, and interviews. That said, all of my substantive contributions concern various aspects of genius, creativity, leadership, and talent. Moreover, I think my best work on these subjects falls into the following four categories:

1. **Cognitive processes and procedures** – Here my special focus has always concerned creativity, especially as conceived in terms of combinatorial models (Simonton, 2017). Those models have been integrated with the “blind-variation and selective-retention” theory first advanced by Donald Campbell (1960). These efforts resulted in a series of theoretical and empirical articles extending from 1985 to the present day (e.g., Simonton, 2007, 2011, 2015).

2. **Individual differences in intellect and personality** – As previously mentioned, way back in 1976 I published a follow-up to Cox’s (1926) investigation; her IQ estimates were used along with some new variables to re-examine the relation between intelligence and eminence (Simonton, 1976). Another follow-up much later added some of Cox’s unpublished data (Simonton & Song, 2009). In addition, the intelligence-eminence relation was also examined using alternative definitions and samples, including European absolute monarchs (Simonton, 1984), United States presidents (Simonton, 2006b), and eminent African American creators and leaders (Simonton, 2008a). Yet as Cox herself demonstrated, personality variables are just as critical as intellectual variables, and so I have also examined their operation in the achieved eminence of both creators and leaders (e.g., Overskeid, Grønnerød, & Simonton, 2012; Simonton, 1986). Of special interest is the impact of psychopathology, the famed “mad-genius” hypothesis that dates back to Aristotle (e.g., Simonton, 2014c).

3. **Life-span development** – One of the unique features of historiometric research is the possibility of studying the lives and careers of high achievers from birth to death and every age between
(Simonton, 2014b). Not surprisingly, therefore, I have published numerous articles spanning developmental factors across the life span, including family background, education and training, career trajectories, and death. To be sure, some issues on this subject, such as genetic influences, require alternative methodologies. Galton’s (1869) family-pedigree method is simply inadequate to the task. Thus I have also ventured into a mathematical model of talent development (Simonton, 1999b), a meta-analytic integration of behavioral genetic and psychometric research (Simonton, 2008b), and a proposed structural equation model that attempts to combine both nature and nurture (Simonton, 2014a). My extensive work on career trajectories – the relation between age and exceptional achievement – has probably had the biggest impact. My most cited journal article concerns this subject (Simonton, 1997).

4. Sociocultural context – The original reason why I wanted to pursue graduate studies at Harvard’s Department of Social Relations was that it constituted a truly multidisciplinary unit, including not just personality, developmental, and social psychology but also sociology and cultural anthropology. Unfortunately, the year I was accepted, the department fell apart, sociology and cultural anthropology going their separate ways while the social psychology program into which I was admitted the Department of Psychology. Nevertheless, I did not let that circumstance prevent me from becoming familiar with sociological and anthropological perspectives on genius, creativity, and leadership. Nor did that breakup prevent me from devoting my career to studying larger forces operating at the level of nations and civilizations (Simonton, 2019). For instance, I have investigated the impact of political factors such as fragmentation, instability, and warfare as well such cultural influences as religion, ideology, and openness to outside civilizations. I have also examined underrepresented groups within a sociocultural system, that is, both women and minorities (e.g., Damian & Simonton, 2015; Simonton, 1992).

My best work in each of all four of the above categories has received special awards and honors. For example, three of my publications in the individual-differences category were honored with the Mensa Award for Excellence in Research (viz. Simonton, 1985, 2008a; Simonton & Song, 2009). My most frequently cited journal article, mentioned earlier, earned the George A. Miller Outstanding Article Award from Division 1 of the American Psychological Association (APA). Furthermore, several of my more ambitious publications, which attempted to integrate findings across all four categories, have also attained major recognition, such as the William James Book Award (Simonton, 1999a) and the Theoretical Innovation Prize (Simonton, 2003) from APA’s Divisions 1 and 8, respectively. Not bad for somebody whose research might not have been publishable in decent journals!

TSY: What knowledge would you wish researchers in this field to have?

DKS:

Well, most obviously, the phenomena of genius, creativity, leadership, and talent not only feature extremely complex relationships, but also each phenomenon is an intricate consequence of a host of cognitive, individual difference, life-span developmental, and sociocultural variables. That’s why I have always felt obliged to examine these phenomena from as many different perspectives as possible, plus applying a variety of research methods along the way. And even my research program fails to represent all of the possibilities. For instance, I have not conducted any studies in the cognitive neurosciences. That’s not because I have no interest – I studied that approach in both undergraduate and graduate school – but rather there’s only so much one can do in the course of a career. At least I compensated by devoting much more effort than the norm to investigating sociocultural factors, doing so ever since my doctoral dissertation.

The above assertion then leads to a critical corollary: If a very large number of variables contribute to exceptional achievement, then any one variable can only account for a tiny portion of the phenomenon. This lesson is too often forgotten by zealous researchers who seek one-variable explanations that purport to do it all, or almost so. Perhaps the most striking illustration concerns attempts to explain high accomplishments in all domains solely in terms of what has been styled
“deliberate practice” (Ericsson, Krampe, & Tesch-Römer, 1993). This one-sided account is specifically directed against any notion that “innate talent” might have anything to say in the emergence of giftedness and genius. Yet despite more than a quarter-century of research, it is now increasingly clear that deliberate practice, though almost always important to some degree, most often explains much less than half of the variance (Macnamara, Hambrick, & Oswald, 2014). Of course, genetic endowment has a partial say.

TSY: Can you please explain some of the strengths and limits of “Gifted Education?”

DKS:

Because I do not work in the trenches, nor even conduct scientific research specifically aimed at gifted education, this question is the most difficult of all to answer. First, I think the main strength of gifted education is that it exists at all. It reflects a society’s values in that it is willing to invest in the future of its most promising children, to help them cultivate their fullest potential. Second, the main limit is the lack of resources and of sufficient knowledge to implement these values. Not only are budgets tight almost everywhere, but there exist inherent difficulties in the equitable and valid identification of prospective talents. For one reason or another, too many are left out.

I’ve actually experienced both ends of this latter problem. On the one hand, I was once identified as scientific talent for a summer enrichment program called “Junior Research Science” run by the Los Angeles school system in California, where I grew up. It was a central educational experience in my path to becoming a scientist. On the other hand, I also qualified for an accelerated class for the mathematically gifted, but it received insufficient funding, leaving me stranded. So instead I was placed in a regular math class appropriate for my age group, which in effect meant that I was expected to learn over again what I had already learned. I just lost interest because the material was so unchallenging. Instead of getting my usual top grades – normally I competed for the best grade in the class – I fell into the middle of the pack. I remember having a tense interaction with the teacher who was frustrated by my lack of effort. Even though I’d score excellent grades on the tests, my performance on the numerous assignments left much to be desired. So he said “You should be getting A’s on all of your homework. After all, it’s the exactly the same material you did so well on last year.” My response was simply, “That’s precisely why I’m doing so poorly now!” I just wanted to pass the
class. That was my only motivation. If the school cared so little for my math education, why should I care? I had already learned what I had to learn and my time could have been used more constructively rather than doing meaningless problem sets.

**TSY: What are your plans for the next year?**

**DKS:**

This question comes at an unusually pivotal point in my career. I have always been a highly prolific researcher, averaging about a dozen publications per year since my career’s onset in 1975. Yet after retirement in 2016, a number of unexpected events, both personal and professional, recently inspired me to press the pause button on that level of output. That pause would give me the leisure to figure out how to use optimally whatever years remain to make the contributions I would most like to make in the field.

The most obvious of these events is the Covid-19 pandemic. In 2019 I delivered seven talks, including one at the Karolinska Institute in Stockholm; yet all invited addresses planned for 2020 had to be cancelled or postponed. In fact, at one such presentation I was to be honored with the 2019 Mensa Lifetime Achievement Award, which by custom is bestowed in person, with appropriate ceremony. The event was scheduled by the Research on Giftedness, Creativity, and Talent SIG (Special Interest Group) for the American Educational Research Association meeting in April of 2020, but no such luck! Eventually Mensa just gave up, and sent the award to me by snail mail without any formal presentation!

Yet aside from this worldwide misfortune there are other problems facing only the academic realm. For example, conflicts over sustainable publication models have led to some drastic changes. In the case of the University of California system, where I am an emeritus professor, the decision was made to no longer provide its faculty and students with access to Elsevier’s scientific journals. All subscriptions were just terminated despite the fact that it’s one of the leading publishers in the world. To be sure, current articles most often remain available via direct requests to their authors, or sometimes through some service like ResearchGate, yet the whole process of doing “library research” has become more cumbersome and often expensive.

A more serious change in recent years is the increased politicization and polarization of academic research. The security of “ivory tower” scholarship has gone by the wayside. Let me provide one recent example to which many IJTDC readers can easily relate. The *Gifted Child Quarterly* (*GCQ*), which is the official publication of the National Association for Gifted Children (NAGC), sent out a call for articles on Terman’s (1925-1959) *Genetic Studies of Genius* (https://apadiv15.org/2019/02/14/call-for-manuscripts-special-issuе-of-gifted-child-quarterly/). The special issue was to be edited independently of the regular journal editors, and with the editorial independence expected for such issues. After the submission, evaluation, and revision cycles were all completed, the special issue was scheduled for publication in October 2020 along with an introduction by the guest editors. My own contribution, which focused on Cox’s (1926) second volume, had even already appeared online (Simonton, in press). Then after protests arose over the issue (see https://www.nagc.org/issue-‘un’-special-issue-points-reflection), NAGC decided to cancel the endeavor. Because the contributions had already been accepted, the authors would still get published in *GCQ*, but singly, and if possible only one article per issue (albeit that
provision was impossible to implement without cancelling a whole issue). The considerable efforts of the guest editors came to naught (but see https://psyarxiv.com/nh43b/). An opportunity to place Terman’s monumental volumes in an updated scientific context was also lost. Ironically, judging from the table of contents of the revoked collection, that’s likely also a loss for those who were opposed to the special issue.

As for my own plans in 2021 I hope to press the start button to examine some possibilities. But I imagine that the narrative will not follow precisely the same trajectory of the last 45 years. Right now I’m contemplating a magnum opus that puts everything together. The tentative title is The Genius as the Creator of History: A Psychology of Civilization. But who really knows what the future brings in these uncertain times?

TSY: You have been working with a number of scholars. Can you tell us some memories about these people?

DKS:

My work style is more that of a lone wolf. In fact, 93% of my publications are single authored. Hence, my main contacts take place at professional meetings of various kinds. For example, I first met Howard Gardner in 1990 at a Mini-Conference on Creativity held at Project Zero in Harvard’s School of Education. Later in 2009 he and I delivered a joint E. Paul Torrance Creativity Lecture at the NAGC meeting in St. Louis. The topic was on “Larger than life: Exploring the lives of eminent creators,” but instead of two formal presentations, we answered questions given us by Ann Robinson, who I think had been elected NAGC president that year. Later I contributed a chapter devoted to evaluating Gardner’s Creating Minds (Gardner, 1993; see Simonton, 2006a). Finally, I added a piece to the Festschrift to honor his 70th birthday (https://howardgardner.com/2014/05/27/mind-work-and-life/). I also met Ellen Winner at that same Project Zero conference, though she wasn’t one of the principal participants at the time. We met again in 1995 in an international conference on the acquisition of expert performance, where we represented a minority position. Almost everybody there had the opinion that innate talent doesn’t exist, most notably Anders Ericsson and his students.
Interestingly, Ericsson’s own mentor, the Nobel laureate Herbert Simon, was there as well. Simon and I got into an uncomfortable breakfast chat in which Simon insisted that the findings of modern behavioral genetics just cannot be believed! In any event, I later wrote an article for Winner’s own Festschrift, reporting this (Simonton, 2020).

Let’s get back to Anders Ericsson, who I also first met at that 1995 expertise conference. We ended up with a long history representing conflicting points of view on whether genius is born or made. Indeed, in 2006 he invited me to give a colloquium talk on that very subject at Florida State University, where he spent his career. Then in 2011 Ericsson and I had a more direct and public confrontation in an evening panel discussion on “10,000 hours: Does practice make perfect?” held at the Student Union at Pomona College. In truth, the most unpleasant part of that meeting was the dinner right before. Echoing his mentor, Simon, he insisted that there are no reliable individual differences in human abilities except what can be attributed to education and training. A few years later, in 2014, we published an exchange regarding creative expertise in the journal Intelligence. Despite our differences, we invited each other to contribute to our respective handbooks, his on expert performance and mine on genius (Ericsson, 2014; Simonton, 2018a). Unfortunately, I ended up getting the last word in our debates when I reviewed his book Peak: Secrets from the New Science of Expertise (Ericsson & Pool, 2016; see Simonton, 2016a). I say “unfortunately” because he passed away on June 17, 2020, at age 72. Because he and I were born almost exactly three months apart, and as I am also 72 as I write this paragraph, it makes me ponder all the more my own mortality – thus keeping that pause button pressed down!

Naturally, Festschrifts tend to evoke thoughts of a different kind of mortality, namely creative mortality – a postmortem examination of somebody’s career as if it’s done. So imagine my surprise when I became the subject of my own Festschrift at the 2019 Oregon Creativity Conference! Mark Runco, who I first met at a creativity conference held in 1988, put it all together, right before my keynote address. Although Howard Gardner and Ellen Winner couldn’t attend the event, they co-authored an excellent commemorative letter. The panel members who could attend included younger colleagues, namely, Selcuk Acar, Ronald Beghetto, and Gregory Feist, as well as Teresa Amabile, who I also first met at that same 1988 conference where I met Runco. Amazingly, she had saved correspondence from decades earlier, and used it to do a thorough “roasting” of the panel’s supposed honoree. Little did she know that I had already accepted an invitation to deliver my own talk at her Festschrift held at Harvard Business School only a few months later. But I was a bit nicer.

I guess it’s best to stop here. It’s dangerous to ask a senior colleague to recall memories from ancient episodes in their career! My apologies to all of the distinguished colleagues who I didn’t manage to fit within this brief interview.

References


