

## CHAPTER THIRTY TWO

# DEAN KEITH SIMONTON: A TRULY REMARKABLE CONTRIBUTION TO CREATIVITY STUDIES THAT WILL BE ONE FOR THE AGES

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**ABSTRACT:** The research oeuvre of Dean Keith Simonton has propelled the field of creativity studies into new territory and brought with it a raft of critical insights. For over 50 years, Simonton, by applying a scientific lens, has interrogated some of the most important phenomena in the history of creativity studies, such as leadership, genius, talent, giftedness, and expertise. He has pioneered the application of quantitative methods, in particular historiometry, to the work of the great composers, to cinema, to visual arts, and to creative writing. While not without his critics, Simonton has offered the field of creativity studies a wealth of evidence-based insights and directions for future research. Importantly, his research often considers potential future realities for societies. Simonton is a generous scholar; he acknowledges the work done by pioneers in the field and that of his contemporaries. In addition, he seeks to make his often-complex work accessible to a wide readership and is dedicated to furthering the field of creativity studies.

*Keywords:* Dean Keith Simonton, historiometry, creativity, artists, genius

### **Dean Keith Simonton: A Truly Remarkable Contribution to Creativity Studies That Will Be One for the Ages**

Highly creative scientists are ambitious, show a strong interest in science, read voraciously early on, and are high in openness to experience showing a broad range of hobbies and activities. Simonton fits this profile perfectly. His highly ambitious disposition pushed him through life and helped him refuse to conform to people's expectations and break all norms. (Damian, 2020, p. 514)

It was a challenge when starting to write this chapter about the eminent psychologist Dean Keith Simonton, given early searches of relevant literature and commentary revealed that Rodica Damian (2020) had already published a brief but excellent biography of Simonton in the third volume of *The Wiley Encyclopedia of Personality and Individual Differences*. In this biography, Damian (2020) describes the eminence of Simonton in the field of psycholo-

gy scholars, in particular his output over time and which already exceeds several of the most lauded psychologists in history, including Wilhelm Wundt, Sigmund Freud and William James. The major positive to come from the reading of this entry was that it confirmed my preliminary insights into Simonton's major contribution to the field of creativity studies and the subfields of eminence, talent, and genius in particular. Specifically, Simonton brings to the field of the traditional arts (in particular music, creative writing, and cinema) a disciplined and rigorous approach to investigating what are often seen as forms of creativity which are challenging to decipher and quantify in any measurable way.

At the time of writing this chapter, Simonton's output was simply staggering: 14 books, 155 chapters, 55 encyclopaedic entries, and 350 contributions to journals, periodicals, and annuals. On average he produces approximately eight publications a year which for any academic and researcher in higher education is outstanding, particularly given the quality and eminence of the journals and publishers that feature his work. In addition, one need only look at his works in progress to see just how productive he continues to be (Simonton, n.d.-b). When asked about this very high level of productivity, Simonton commented that it is much easier when working on many projects at the same time, and how a key benefit of this is that one idea on one project may have a surprising insight towards another (Damian, 2014).

Additional measures of quality and esteem include the fact that, according to Google Scholar, his work has been cited more than 31,000 times; he has a h-index of 85 (meaning 85 of his outputs have been cited 85 times or more) and an i10-index of 291 (meaning 291 of his outputs have been cited at least 10 times). He has been awarded countless prestigious awards and commendations (Damian, 2020) and he has been lauded for research studies which feature impressive datasets (Ginsburgh & Throsby, 2013). For a prospective or emerging scholar in the field of creativity studies, he represents a remarkable figure in terms of productivity and achievements and is a light on the hill for inspiration. He reflects very positively on the current state of the field, describing it as a "Golden Age for creativity research" (Simonton & Lebuda, 2019, p. 143). As Damian (2020) also states, "the inevitable conclusion is that Simonton himself would make an excellent participant in his studies of great psychologists" (p. 514).

One of the milestone moments in the field of creativity studies, frequently cited in creativity studies literature, was the keynote address by Joy Guilford at the American Psychological Association conference in 1950, where he argued the need for much greater work and research output in the field of creativity studies. Simonton was certainly one of the psychologists who took the lead from Guilford and voraciously pursued research and scholarship in the field and with intense passion, the latter often coming through in his writerly voice. Another feature of his research career is that he has never remained dogmatic, static, or monocular in his views or in the thinking and insights that he brings to the field of creativity studies. As he states, his work has "always been both substantively and methodologically diverse" (Simonton & Lebuda, 2019, p. 142). In another interview, he notes that "people should not forget that I have also published mathematical mod-

els, computer simulations, qualitative single-case studies, and even laboratory experiments” (Damian, 2014, p. 25). At the same time, his decades of work in reviving, developing, and applying historiometrics as a research methodology is, without question, what sets him apart as a true leader in the field of creativity studies and what makes him unique (Damian, 2014).

A key characteristic of Simonton’s career has been his determination to tackle obstacles and push through boundaries. For example, when applying for PhD studies in the field of social psychology—his great passion—he was told it was too unconventional by faculty at Stanford University. He was fortunate however to be able to pursue this passion at Harvard, completing his PhD in the field of the social psychology of creativity. This hurdle was another early example of Simonton’s steely determination, refusing to conform to the zeitgeist of the time in the field of psychology research, but rather laying the foundation for a research career that has played a major part in establishing the application of social psychology methodologies to the field of creativity studies. This steely determination continued, Simonton choosing to submit to a top tier journal in 1975 for example, despite being warned against it; the work was accepted soon after and received warmly for its freshness. Simonton (2002b) has had to display tenacity and courage in his career, remaining persistent and resilient to criticism and rejection, and maintaining self-belief in the quality and relevance of his research. A parallel can be drawn here to the great composer Beethoven—one of the artists featured in Simonton’s research oeuvre—with Beethoven often enduring painstaking struggles when composing many of his greatest masterpieces, and who faced ongoing criticisms and challenges in his lifetime.

A major feature of Simonton’s research output is the application of high-level quantitative research rigor to a domain of practice which traditionally rests on its laurels of “art for art’s sake”, or where its loudest constituents howl from the wings or stamp their feet arguing that great art cannot be measured, predicted, or explained. Simonton’s work demystifies the perception that art speaks for itself in magical or mystical ways, and offers direct insights into the structural, pattern-based, biographical, and temporal aspects relevant to the masterpieces in question, such as Shakespeare’s sonnets and plays or Beethoven’s symphonies. In relation to Beethoven, a remarkable achievement of Simonton’s computerized content analysis is how he demonstrated why the composer’s odd-numbered symphonies have proven more prominent than those with even numbers, a belief widely held in musical circles but not evidenced empirically prior to his research (Damian, 2014). Beethoven’s Third (Eroica), Fifth, and Ninth (Choral) symphonies remain far more known and lauded than any of the even-numbered symphonies. He also demystifies the notion of the genius element of the great creatives (Simonton, 2014a), in that through his historiometric studies, Simonton evidences that the great creative geniuses do not consistently produce works that achieve aesthetic or critical success (e.g., Shakespeare and Beethoven). He shows both the creative genius achieved by eminent artists, but also reveals that they produced works which did not reach the same heights as others; as an example, he cites the differences in terms of how successful Shakespeare’s play *Hamlet* has been in comparison to *Timon of Athens* (Simonton, 1986b).

In much of his research, Simonton focusses on the lives and output of eminent creatives in history, using historiometrics as applied to biographical data. In a detailed overview of the history, literature, and specific methods involved in historiometric research, Simonton (1999) refers to the three essential components of this approach: (a) it seeks to test nomothetic hypotheses concerning human behavior; (b) quantitative analyses dominate investigations; and (c) historical individuals, not living people, are the subjects of the inquiries. Simonton (1999) concludes this particular chapter by referring to how historiometry (given its distinct approach) has ongoing relevance and offers distinct advantages for “the scientific study of creativity in its most stellar form” (p. 125). He is perhaps best known for being a world leader in the use of historiometry.

In relation to myself as author of this chapter, it was inordinately refreshing to delve into a fascinating and very compelling body of research that brings an entirely new perspective by which to look at creativity within the art domain. It is a privilege to be able to offer some insights into the contribution of this remarkable thinker and researcher. However, to attempt to adequately overview let alone detail the remarkable number of studies he has undertaken would be simply perilous in any single publication. Further, a reader can engage with Simonton’s own very detailed, personable, and interesting autobiography of how his career and use of historiometry developed up to 1990 (Simonton, 1990), which today we could perhaps see as the first third of his career. Hence this chapter seeks to provide highlights, or examples of studies that provide evidence of Simonton’s contribution to the field and in particular, what constitutes giftedness, talent, and genius; the mad-genius paradox controversy; as well as how creativity (and genius) might be better understood in the fields of music composition, creative writing, and contemporary cinema.

### **Giftedness, Talent, and Genius**

At the time of writing this chapter, one of Simonton’s latest publications set out to disentangle the concepts of giftedness, talent, and genius, three concepts that he has considered and researched for decades. Initially referring to how these three terms are largely interchangeable in the literature, he then provides an explanation of how giftedness is best associated with preadult years (childhood and adolescence), talent explains the nature (genetics) side of giftedness, while genius “entails adulthood achieved eminence rather than childhood elevated performance with respect to some established norms in a culturally valued domain” (Simonton, 2021, p. 399). As is common to Simonton’s views and research approach, he argues that genius is best identified posthumously, in order that there is sufficient time to allow the outputs produced—be they theories, ideas, military strategies, political decisions, art works, or innovations—to stand the test of time and remain as a crowning achievement in a field of endeavor or part of society. In conclusion, Simonton (2021) acknowledges that while his unpacking of these three concepts (giftedness, talent, and genius) has substantial merit, given the long tradition of research in the area and the current national definition of giftedness in the United States, there is more to be done. For any researcher interested in these

three concepts, Simonton's research output and most recent study provide a wealth of empirical findings and insights.

### **The Mad-Genius Controversy and Paradox**

The perceived or real link between psychopathology and creativity has fascinated and challenged great thinkers, commentators, and researchers for centuries. There are countless references in the literature, for example, to Plato's idea of divine madness in poets, the idea of the muse, as well as the debates as to whether genius requires some form of accompanying symptoms of psychopathology. Debates range between those who state there is categorically no clear link between psychopathology and eminent creativity, those who argue that there may be a link, and those that argue there is in fact a clear link (Abraham, 2015). These debates continue: Kyaga (2018) describes it as "one of the fieriest debates in creativity research" (p. 114), while in his most recent writing on the subject, Simonton (2019) adds that the "mad-genius controversy concerning the relation between creativity and psychopathology is one of the oldest and most contentious in the behavioral sciences" (p. 17). Rather than adopt an either/or stance, which he argues too often dominates debates in the psychology field, Simonton (2018) argues that both sides have relevance; he is clear that "the relation between suicide and mental illness is complex" (p. 19).

In his research he raises a number of pertinent and challenging questions, for example, who decides whether an eminent creative or genius is in fact a victim of debilitating mental health disorders? Alternatively, in what ways is it possible to determine whether an individual's mental health disorder is a requirement for their achieved creative excellence or genius? Another compelling question he raises is in relation to whom you would compare the creative genius to: a randomly selected person or somebody closely matched across a number of variables such as age and gender? He also challenges the body of research that focusses on living participants for the testing of the psychopathology-creativity relationship, arguing that any point-in-time analysis fails to cater to the longer-term relationship between these two factors, and in particular whether it is a linear or curvilinear relationship. In addition, he argues that using a living sample is methodologically flawed given the work/achievements have not yet stood the test of time (Simonton, 2019), a valid point given in the art world, the likelihood of achieving enduring success and popularity is of prime concern in evaluating the merit of a contemporary work by a living artist.

In a major study focussed on 204 eminent creatives from Western civilization born between 1766 and 1906, Simonton (2014b) applies historiometrics to establish that geniuses in artistic fields are more likely to suffer from psychopathological conditions than those in the sciences. He found the relation between psychopathology and eminence changes across the five domains that were researched. For creative writers and visual artists the relation is positive and linear, but for the scientists, thinkers, and composers, the relation is described by an inverted-U curvilinear relation, with a different optimum for each. The optimum is at the lowest level for the scientists so that the overall relation proves negative, unlike the other four creative domains.

In another paper, Simonton (2017) discusses research that hypothesizes that those who go through diversifying experiences—such as the loss of a loved one at a young age—could be a crucial factor in the development of creative potential. While any developmental adversity, if severe, has the potential to destroy an individual's creativity, the key is finding what Simonton (2017) refers to as the "sweet spot". The hypothesis therefore is that those who go through significant adversity will display less intense symptoms of psychopathology. This was tested by Simonton with the data relevant to 291 eminent African Americans who lived and created before the civil rights movement, thus suffering poverty and severe discrimination. It was proposed that this group would suffer less symptoms of psychopathology than those in the majority (white) culture who had not experienced such hardship. Simonton confirmed that the African American artistic creators showed more signs of psychopathology than did noncreative African Americans, but what they also found was that none of the writers (including such poets as Maya Angelou and Gwendolyn Brooks) took their own life through suicide. He cites Maya Angelou as an example of an eminent artist who suffered extreme developmental adversity but who showed no signs of adult psychopathology.

In summary, the statement that perhaps resonates the most for current and future researchers with an interest in the highly contentious mad-genius area is that the creativity-psychopathology issue is "far more complex than meets the eye" (Simonton, 2017, p. 240). Yet rather than sit on the fence or further obfuscate the issue, Simonton offers a well-reasoned and balanced view, enabling others a basis by which to consider their own views and undertake new research studies: "Creative people as a group can enjoy more mental health than noncreative people, yet the most highly creative people may suffer more mental illness than less creative people" (Simonton, 2017, p. 244). As is typical of his desire to offer directions for other researchers, Simonton (2019) recently referred to seven elements that need to be addressed in future enquiries in the area of the psychopathology-genius paradox, namely "target persons, mental disorders, creative domains, specific hypotheses, quantitative assessments, data analyses, and theoretical explanations" (p. 17). Simonton's pioneering work in this area, without question, offers a tremendous platform for further research in the field.

### **Creativity and Music Composition**

Over the course of his research career, Simonton has investigated various factors and variables associated with eminent composers, the notion of the masterpiece, career trajectories (early, best, and last works), the swan-song phenomenon (final masterpiece), and aesthetics in music. As he indicates, composition is one of the most mathematical of the art forms, hence the suitability of using historiometrics as the dominant methodology (Simonton, 1986a). However, rather than rely purely on computational analysis, he brings in artistic, biographical, and historical conditions that had both direct and indirect impacts on the relevant musical masterpiece.

In an early study of 10 eminent composers of classical music, Simonton (1980) investigated the differential fame of 5,046 melodic themes created by this group, using computerized content analysis. As perhaps one of

the most famous examples, Simonton questions why it is that Beethoven's Fifth Symphony, with its accompanying "death knocking at the door" opening motive, is arguably better known than the majority of symphonies written by all other composers. Implementing a rigorous testing process, Simonton (1980) was able to identify that:

- biographical stress (e.g., a death in the family) has a direct impact on increased melodic originality;
- there is some decline in melodic originality in the latter part of a composer's career;
- as time progresses a composer must create ever more original themes to retain favor with audiences; and
- there is a positive linear function between the popularity of a theme and melodic originality.

At this point in his research career, Simonton (1980) acknowledged the need for a much larger sample of composers and melodic themes before generalisations could be made.

In a further study in this area, Simonton (1986a) analysed a larger body of data consisting of 8992 melodic themes, aggregated into 1,935 compositions, from 172 composers from the Renaissance period to the 1980s. Simonton (1986a) used four gauges of success in the quantitative method, namely composition popularity, aesthetic significance, accessibility, and minimum age. One of the interesting findings was that "composers born farthest away from the musical centers of their generation create works that are more accessible, less popular, and, most critically, less variable in the originality of thematic material" (Simonton, 1986a, p. 15). The other finding of significance was the "tendency for wartime compositions to display more extreme fluctuations in originality during the course of a piece" (Simonton, 1986a, p. 15), in terms of melody, rhythm, dynamics, and structure. Finally, Simonton (1986a) suggests that the "musical zeitgeist may provide the baseline for a composer's melodic thoughts, yet departures from this given pattern likely hint at the composer's emotional state at the moment of composition" (p. 15).

While more recent research (Meredith & Kozbelt, 2014) challenges the robustness of the results in a further study on composers (Simonton, 1989b), at the time it was considered very innovative. In this investigation, Simonton (1989b) looks at the concept of the swan-song phenomenon and a composer's final works. After initially referring to the fact that composers are generally most productive at the midcareer point, Simonton (1989b) set out to examine any distinctive features of composers' last works, including the extent to which the proximity of death results in a direct impact on musical form and content. Simonton (1989b) assessed 1,919 compositions (by 172 composers spanning almost 500 years) on seven aesthetic attributes: melodic originality, melodic variation, repertoire popularity, aesthetic significance, listener accessibility, performance duration, and thematic size. Simonton (1989b) found that composers aim to produce masterworks in this final phase, which are "apparently brief, relatively simple in melodic structure, but profound enough to acquire a lasting place in the concert hall" (p. 45). He then proceeds to argue that the swan-song phenomenon is not a myth, suggesting that

it is more an expression of acceptance, resignation, and contentment, rather than a sense of despair or tragedy. He concludes by proposing that the swan-song effect would have significant relevance to other fields, such as literature and the visual arts.

### **Creativity and Writing**

The literary genius that dominates Simonton's research in this area is Shakespeare. In a study focussed on Shakespeare's 37 plays, Simonton (1986b) again uses historiometrics to interrogate the reasons why some of the plays achieved more success than others, notably bringing into the conceptual framework the need to consider the biographical background of the playwright (e.g., age and life experiences) as well as the surrounding circumstances of the time (e.g., political and cultural events). Applying a factor analysis using 19 indicators (e.g., frequency of performance on stage and film versions), the results indicate that there is a range of success or popularity across the 37 plays, ranging from *Hamlet* as most successful, to *Timon of Athens* as one of the least successful. In order to test the validity of the method, Simonton asked two professors, both experts in Shakespeare studies, to rank the 37 plays using such measures as the standard US grading system of A to F (with + and -), most personal plays, amplitude, and achievement. Totalling 15 measures, the "subjective judgments of these two experts reveal[ed] a tremendous concordance with the 19-indicator objective index" (Simonton, 1986b, p. 498) that Simonton developed and applied.

In another study, Simonton (1989a) analysed the 154 sonnets written and published by Shakespeare in 1609, now over 400 years ago hence with ample time for the works to have been exposed to the views and criticisms of readers, academics, and critical writers. After applying a rigorous system of quantitative analysis based on over a century of sources including anthologies, quotes, and literary digests—totalling 27 individual measures—Simonton (1989a) is able to demonstrate that the "exceptional sonnets among the 154 are those that treat an impressive diversity of themes, use extensive primary-process imagery, and convey all this manifest and latent content in a rich language that projects considerable arousal potential" (p. 713). While Simonton has also published numerous other papers focussed on Shakespeare, the two discussed briefly here provide an insight into how his application of historiometry enables keen evidence-based insights into the nature of Shakespeare's literary genius.

### **Creativity and the Cinema**

Simonton's work on cinematic creativity came in the second half of his academic career, largely due to the experiences of one of his students who had to abandon an assignment in this area because of the lack of published empirical research (Henshon, 2011). Simonton (2002a, 2013b) immediately draws out the considerable distinction between the collaborative nature of making movies as against the individual creativity associated with eminent compositions, paintings, or plays for example. He cites two classic movies—*Gone With the Wind* and *Casablanca*—which were the product of a collective of creative



minds rather than individuals, although he does cite the often-referred-to significant focus on the director as key to a movie's success. He also highlights the vastly different monetary investment associated with producing films, particularly the Hollywood blockbusters such as the *Lord of the Rings* trilogy, one of the most well-known recent examples. His body of research has focussed on the factors which lead to a film's comparative success (Simonton, 2002a, 2009), the extent to which cinematic creativity is linked to a film's budget (Simonton, 2005), the impact of the music score on a film (Simonton, 2007b), the influence of sex scenes (Cerridwen & Simonton, 2009), the productivity of film composers over their career (Simonton, 2007a), and the impact of the screenplay on a film's success (Simonton, 2013b).

In an early study, Simonton (2002a) assessed 2,323 movies from the period 1928 to 2000 that were nominated for Academy Awards in the major categories. After applying selection criteria and predictor/control variables, Simonton (2002a) was able to identify that:

- directors and screenwriters have a significant effect on a film's success;
- other key persons such as actors and film editors have less of an impact;
- visual and sound effects have virtually no effect; and
- a film's success is a complex phenomenon and further research is necessary, for example, in relation to scepticism about the validity of Oscar nominations and wins.

In a second study related to film success, Simonton (2009) explores the aesthetic factors and associated complexities with determining the relative success of 1006 narrative films released between 2000 and 2006. By applying a number of endogenous and exogenous variables—such as film critic reviews, academy awards, budgets, ticket sales, and release season/year—he then constructs a recursive model to analyse the data and connect cinematic success with aesthetic and economic antecedents. Simonton (2009) proceeded to identify three general conclusions: (a) that cinematic products can be divided into works of art and works of entertainment, (b) that no predictor displays a consistently positive impact (he cites longer-running films as generally more favoured and awarded), and (c) that a film's success is not easily predicted given the range of intricacies involved. As typical of his work, Simonton (2009) describes this particular research as exploratory and recommends further studies.

In a 2005 study, Simonton set out to assess the impact of a film's budget on its cinematic creativity, using multiple criteria (critics' evaluations, awards, earnings). After identifying a sample of 203 narrative films released between 1997 and 2001, and applying a robust methodology, the results indicated that:

- large budgets do positively correlate to a film's earnings (e.g. *Titanic*);
- on the other hand, large budgets do not guarantee either award nominations nor wins, and are in fact a negative predictor; and

- while large budgets do enable excellent visuals, special effects, and music, it is great screenplays, directing, acting, and film editing that have more impact in terms of critical awards, and regardless of the budget size.

In conclusion, Simonton (2005) states that a great drama “buys more success than does copious cash” (p. 13).

### Views of Others

A number of eminent psychologists and others have commented extremely positively on the numerous texts that Simonton has published, with key examples of the compelling recognition of the timeliness, thoughtfulness, and excellence of his work provided on Simonton’s website (Simonton, n.d.-a). Additional examples of the esteem to which his work is held include the following statements made by his peers:

- Stam (2003), in discussing the measurement of eminence through historiometric methods, states that “Simonton has to rank as one of its most skilled practitioners” (p. 277).
- Kozbelt (2008) refers to the three decades of “groundbreaking historiometric research on classical composers” (p. 182).
- Stroebe (2010) refers to Simonton as “undoubtedly the most important and prolific researcher in the area of the psychology of science. He developed an elegant quantitative model of the decline in creative potential, which predicts that the association between age and productivity is curvilinear and declines with career age rather than chronological age” (p. 662).
- Kozbelt (2019) later refers to Simonton as “easily one of the all-time most eminent creativity researchers (especially of Big-C creativity)” (p. 81).

Part of the research and writing of this chapter involved the author contacting a sample of his graduate students, these listed on his website and with publicly available contact details obtainable. Each was invited to reflect on their time working with Professor Simonton and offer any insights they wished to do; some did this by email while I had the privilege of speaking to a small number via Zoom. In general, there was overwhelming support for his work as a supervisor, colleague, and supporter. Given these individuals agreed to offer reflections on the basis of anonymity, they are referred to as Graduate A, B, etc., with a sample of reflections as follows:

- “I enjoyed his teaching style and the few meetings I had with him” (Graduate A).
- “He was on my dissertation committee, a study of creativity ... and supplied helpful advice throughout that process” (Graduate B).
- “Dean is a fascinating person, full of energy, a walking encyclopedia, a very creative thinker” (Graduate C).
- “This is a well-deserved honor for Dean Simonton” (Graduate D).

- “Aside from his enthusiastic support for my research, I remember him for his truly prolific publications on a wide variety of topics ... Dean has certainly enriched current thinking in psychology” (Graduate E).
- “I would not have been able to finish the program if Dean had not taken me as a graduate student” (Graduate F).
- “Those are the times I remember most fondly of my time with Dean – the discussions in his office with a small group of graduate students” (Graduate G).
- “He was pretty perfect as a doctoral adviser” (Graduate H).
- “He told me that if you are going to pursue an alternative area of research, be very good at it” (Graduate I).

### Criticism of His Work

Like any pioneer in a research field, Simonton’s work has not been without criticism. One notable early example is referred to by Simonton (1990) as “the case of a reader who informed the journal editor that my paper was the worst he had ever read in an entire career of reviewing manuscripts!” (p. 108). Despite publishing extensive empirical support for his Darwinian theory of creativity, which brings in an evolutionary element to the creative process, this interpretation has often been challenged, with Hennessey and Amabile (2010) referring to this criticism being centred around the view that expertise (talent or acquired) has an essential role to play. As a more specific example, Simonton himself refers to how his application of a Darwinian theory of creativity to Picasso’s work *Guernica* “was attacked almost immediately” (Simonton, 2007c, p. 330). In a review by Galatzer-Levy (1985) of his 1984 book *Genius, Creativity and Leadership: Historiometric Inquiries*, Simonton is criticised for the way he assesses intelligence given his subjects are deceased, the way he interprets the quantitative results, and a general lack of detail relevant to the history of science. While there may be other negative assessments of Simonton’s work, they are difficult to find in the literature, in itself a sign of the respect with which his work is held amongst peers in the field.

### Conclusion

By reading Simonton’s work and his interviews, one gets a clear sense of his passion for social psychology research and his genuine concern for the field and for the creativity studies research discipline. The following reflections exemplify his generous spirit and desire to see the best for the field, his peers, and the next generation(s) of researchers:

- “I would hope that the field would tighten links with the social sciences, such as economics, political science, sociology, and cultural anthropology” (Damian, 2014, p. 26).
- “I do have wishes for the future ... my main hope for the psychology of creativity is that it acquire more theoretical coherence” (Simonton & Lebuda, 2019, p. 143).

- “Whether my endeavor to untangle these concepts [giftedness, talent, and genius] succeeds depends on future developments in research and practice. It’s now out of my hands, but I have hopes” (Simonton, 2021, p. 404).

One of the features of Simonton’s research is his ability to interrogate and synthesize the literature, to justify, and to explain the key methodological issues relevant to the research undertaken, to present findings in a clear and compelling narrative, to provide directions for further work, and to extrapolate the relevance of the research to wider society. His research papers typically contextualize very important issues, then proceed to apply a clear and systematic methodology, after which interpretations are always balanced and thoughtful. He has made a conscious effort to make his complex work readable and interesting (Henshon, 2011). For example, his book *The Genius Checklist* (Simonton, 2018) is eminently readable, informative, and interesting, and would be a tremendous starting point for anybody that is curious about the genius concept.

Simonton’s work also raises several questions for the reader regarding the future in terms of creativity, productivity, geniuses, and genius moments. For example, to what extent are we likely to see another Shakespeare, Einstein, Napoleon, or Beethoven? Do our current educational, social, and cultural structures adequately facilitate and enable the realisation of new scientific or artistic genius? Why is it that in terms of the second half of the 20<sup>th</sup> century, we are yet to reveal in any significant way who are its geniuses? Or, in light of Simonton’s view that the test of time is needed in making such assessments, is it too early to tell? Will future generations look back and identify Bob Dylan, Banksy, Stephen Hawking, Warren Buffett, Barack Obama, Mark Zuckerberg, or Bill Gates as a genius in their respective fields?

Simonton also brings what I suspect is his sense of humor into his work at times. For example, in his 2017 paper on the mad-genius controversy (Simonton, 2017), his final statement—which follows reference to the very complex nature of this phenomenon and if/how it exists—is perhaps tongue in cheek or just simply honest: “Those who want simple answers should switch to questions that have really simple answers” (Simonton, 2017, p. 246). Similarly, when discussing how severe psychopathology in fact terminates creativity, Simonton (2010) remarks that “when geniuses commit suicide or die of a drug overdose, they cease to be creative” (p. 225). When asked about his role as a Distinguished Professor, he responded that it is “the easiest job in the world. All you have to do is be distinguished—in research, teaching and service ... if you’ve regressed to being merely ordinary, then you get demoted to plain Professor” (Henshon, 2011, p. 73).

Ultimately, Simonton (2013a) refers to the fact that while there are extensive insights into what makes a genius across many fields, he also argues that there is “a very long way to go before we obtain a complete picture of the artistic genius” (p. 43). At the same time he has made major advancements in the study of creativity as applied to eminent artists, as well as highlighting the need to further examine how sociocultural factors may or may not impact the aesthetic success of creative outputs. Nevertheless, he makes a

compelling argument in relation to the impact of artistic genius on the everyday lives of millions of individuals, an argument that is hard to challenge:

artistic geniuses generate creative products that have far more personal meaning than anything produced by the greatest scientific geniuses. In all likelihood, more persons have been profoundly affected by Shakespeare's Hamlet, Beethoven's Fifth Symphony, or Michelangelo's Pietà than by Newton's Principia Mathematica or Darwin's Origin of Species. From an economic standpoint, too, that differential means that more people are willing to pay more money to experience Hamlet on stage, hear the Fifth in concert, or view the Pietà in St Peter's than even to buy a second-hand copy of the two greatest scientific books ever written. Artistic geniuses are prototypical of the phenomenon. (Simonton, 2013a, p. 42)

Simonton is a humble man, arguing strongly that he was a precursor to the field, and that it is Theresa Amabile should be recognised as the true founder of the social psychology of creativity (Simonton, 2020c). He also has the view that his research output will be more admired than it will be followed explicitly (Simonton, 2020b), reflecting on the fact that few if any of his research students or his peers have pursued the use of the historiometry methodology, and commenting that he was supportive of his PhD students moving to other supervisors in order that they get the best possible mentor(s) (Henshon, 2011). He certainly is the sole research psychologist to spend an entire career studying eminent creators and leaders, hoping that if another researcher with a similar passion comes along, his work will offer a starting point (Simonton, 2020b). A decade ago he was even humble enough to admit that in the area of classical music, a younger researcher had emerged and who was conducting research "far superior to anything I have ever done" (Henshon, 2011, p. 74). While these various reflections are all humble and honourable, it is hard to argue against the reality that Simonton is a true trailblazer with a research legacy to date that should inspire any scholar with an interest in creativity studies.

### Postlude

When considering which psychologist to write about for this text on trailblazers in creativity studies, I was quickly drawn to the work of Dean Keith Simonton, because like him, I grew up with an interest in classical music (amongst many other things). Countless people said to me that I had a great talent that I must surely cultivate, without my knowing what this meant beyond the superficial; for reasons that remain somewhat unclear to me I gradually increased my immersion in classical music, in my case the study of the piano and its enormous repertoire. While Simonton (2020a) demonstrates that music is a domain where both child prodigies and savants are commonplace, I was by no means a prodigy nor a savant, but one of the "ten-year" people he often refers to in terms of expertise acquisition, working tirelessly at the craft from the age of about 14 to 24 before I felt I had any real skill set or capacity to realize the notated musical score with an appropriate sense of style and emotional maturity. I was also drawn to his personal experiences of having to

fight hard to pursue the research career he was passionate about and to overcome many obstacles, rejections, and derisions. In my case I have had to overcome major career obstacles which have been heightened living in Australia, where sporting heroes are considered the geniuses in our society, far more so than artists and other eminent creatives who constantly strive for recognition both domestically and on the world stage. As indicated earlier in this chapter, for me, it has been a privilege to dive into the work of a great scholar and a wonderful contributor to the field of creativity studies and in particular, a scholar whose contribution is likely to be increasingly lauded in future. Simonton's work is not well known in the traditional creative and performing arts academic circles, given his primary domain is psychology and most academics in the arts are focussed very much on their specific discipline. I intend to change this and bring his amazing work in creativity studies into the traditional arts academy as much as I possibly can, so that Simonton's very important insights can inform our understanding of creativity and genius in the artistic context.

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### Editor's Note

Dr Simonton sent in the following biographical note.

#### *Additional Contribution by Dr DK Simonton*

**Dean Keith Simonton** is a native of Los Angeles, California, where he was born in 1948. He obtained his 1970 BA in Psychology from Occidental College and earned a 1975 PhD in Social Psychology from Harvard University. By then Simonton had already launched an original and prolific program of empirical, theoretical, and methodological research on genius, creativity, leadership, talent, and affiliated topics. One highly distinctive feature of this program is that most of his empirical studies use objective and quantitative techniques to analyze multi-case samples of historic figures, from Nobel laureates in the sciences to presidents of the United States.

Notwithstanding this emphasis on historiometric research, Simonton has always used alternative methods. Indeed, he has also published laboratory experiments, mathematical models, computer simulations, meta-analyses, psychometric investigations, secondary data analyses, single-case studies, and interviews. This pluralistic approach has substantially expanded our scientific understanding of the cognitive, personality, developmental, and sociocultural factors behind achieved eminence in a diversity of domains—findings consolidated in various monographs.

All told, Simonton has averaged about one publication per month, including 14 books (11 sole authored, 1 edited, 1 co-edited, and 1 author-reprint collection), 160 book chapters in edited volumes (55 in handbooks), 55 entries in 29 encyclopedias, and 351 contributions to 134 different journals, annuals, and other periodicals (175 full articles and 176 shorter pieces). As if that total output were not striking enough, 93% of his publications are single authored. Yet despite the fact that co-authored work tends to be cited far more often (due largely to collective self-citations), more than 440 of his publications have been cited at least once, and almost 300 have been cited 10 times or more.

Not only does his research appear in top-tier journals, but their editors have promoted 46 of his publications as lead articles in such venues as *Psychological Review*, *Psychological Bulletin*, *Perspectives on Psychological Science*, *Review of General Psychology*, *Psychological Inquiry*, *Journal of Personality and Social Psychology*, *Journal of Personality*, *Journal of Experimental Social Psychology*, and *Journal of Applied Psychology*. Additionally, several of Simonton's single publications have merited even more prominent recognition, namely the William James Book Award (American Psychological Association, APA Div. 1), the George A. Miller Outstanding Article Award (APA Div. 1), the SPSP Theoretical Innovation Prize (APA Div. 8; since 2013 named after Daniel M. Wegner), the Otto Klineberg Intercultural and International Relations Honorable Mention (APA Div. 9), and three Awards for Excellence from the Mensa Education and Research Foundation (MERF).

Furthermore, his long-term efforts have garnered multiple career honors, including the Rudolf Arnheim Award (APA Div. 10), the Sir Francis Galton Award (International Association of Empirical Aesthetics; IAEA), the

Henry A. Murray Award (Association for Research in Personality and Society for Personology), the Joseph B. Gittler Award (American Psychological Foundation; APF), the Arthur W. Staats Lecture (APF), the E. Paul Torrance Award (National Association for Gifted Children), the Distinguished Scientific Contributions to Media Psychology Award (APA Div. 46), and the Mensa Lifetime Achievement Award (MERF). Moreover, Simonton has been selected Fellow of the American Association for the Advancement of Science, IAEA, the Association for Psychological Science, and 12 divisions of the American Psychological Association (viz. 1, 2, 5, 7, 8, 9, 10, 20, 24, 26, 46, and 52), besides election as President of IAEA and two APA Divisions (1 and 10).

One vital feature of his research program is that it displays significant unity in its vast diversity: Despite the range of methods and the variety of achievement domains, his inquiries are closely interconnected. Indeed, virtually all of his publications concern the psychological basis for exceptional personal influence within groups, including teams, networks, disciplines, nations, cultures, and civilizations (to wit, social psychology with the traditional causal arrow reversed 180°). Better yet, Simonton's program exhibits considerable continuity so that most topics are investigated for at least a decade, often yielding a dozen or more publications that combine to produce a cumulative effect—particularly when certain key findings are replicated multiple times under varying conditions. The table below may provide the best examples (see table on the next page).

Of course, these topics often overlap, some publications even treating several at once. Simonton's empirical research on eminent psychologists, for example, covers practically everything imaginable, from sibling ordinal position to the prevailing disciplinary *Zeitgeist*.

Additional biographical documentation is provided in his website located at <https://simonton.faculty.ucdavis.edu/>.

CELEBRATING GIANTS AND TRAILBLAZERS IN CREATIVITY RESEARCH AND RELATED FIELDS

Topics	Years	Highlights
Career landmarks	1975-2021	1997 <i>Psych. Review</i> math model won Miller Award
Scientific creativity	1975-2021	2003 <i>Psych. Bull.</i> review won SPSP Innovation Prize
Sociocultural context	1975-2020	Western, Chinese, Japanese, and Islamic civilizations
Intelligence or IQ	1976-2020	1985 <i>Psych. Review</i> math model won Mensa Award
Family environment	1976-2021	Especially “diversifying experiences” (since 2000)
Education and training	1976-2020	Qualifying the “10-year rule” for deliberate practice
Psychopathology	1977-2020	1998 target article in the <i>Journal of Personality</i>
Multiple discovery	1978-2018	Predictive combinatorial models of the phenomenon
Classical music	1980-2021	Computer content analyses of $\leq 15,618$ melodies
Presidential leadership	1981-2019	2012 OUP handbook chapter consolidates research
William Shakespeare	1983-2009	Computer content analyses of his plays and sonnets
Eminent psychologists	1985-2020	1992 <i>JPSP Centennial Feature</i> (lead article for year)
BVSR creativity	1985-2021	1999 <i>Origins of Genius</i> won the James Book Award
Genetic contributions	1991-2021	1999 math model lead article in <i>Psych. Review</i>
Eminent women	1992-2020	First Ladies, Japanese writers, and psychologists
" African Americans	1998-2015	2008 <i>GCQ</i> article on $N = 291$ won Mensa award
Hierarchy of the sciences	2002-2019	Target article in 2009 <i>Perspectives on Psych. Science</i>
Film creativity/aesthetics	2002-2020	APA Div. 46 award; two books published by OUP
Openness to experience	2005-2021	B. F. Skinner case study in 2012 <i>Perspectives</i>