

Genius 101:

A Book Prospectus for the Springer Psychology 101 Series

Chapters

- 1. Who First Studied Genius?
- 2. What Is Genius?
- 3. Is Genius Generic?
- 4. Is Genius Born or Made?
- 5. Is Genius Mad?
- 6. Is Genius Individual or Collective?
- 7. Where Will Genius Science Go?

Who First Studied Genius?

- Psychometricians:
 - Galton, Terman, L. Hollingworth, and J. Stanley
- Historiometricians:
 - Quételet, Galton, Ellis, J. M. Cattell, Cox, and E. Thorndike
- Psychobiographers:
 - S. Freud, Erickson, and H. Murray

- Definitions
 - Humanistic Conceptions
 - Roman Genius
 - Romantic Genius
 - Scientific Measurement
 - Historiometric Genius

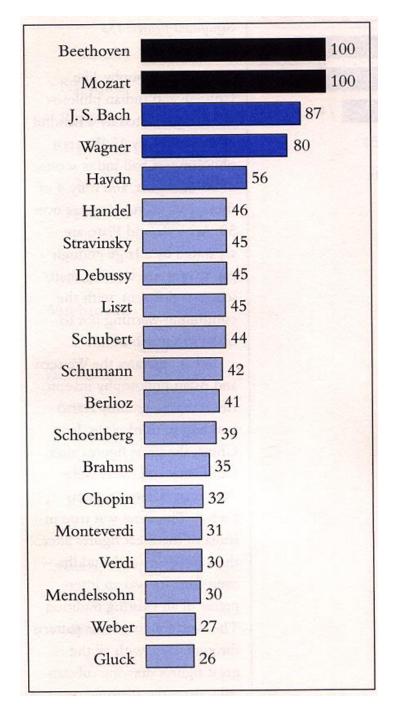
Table 3.2 All-time Eminence Rankings of Classical Composers

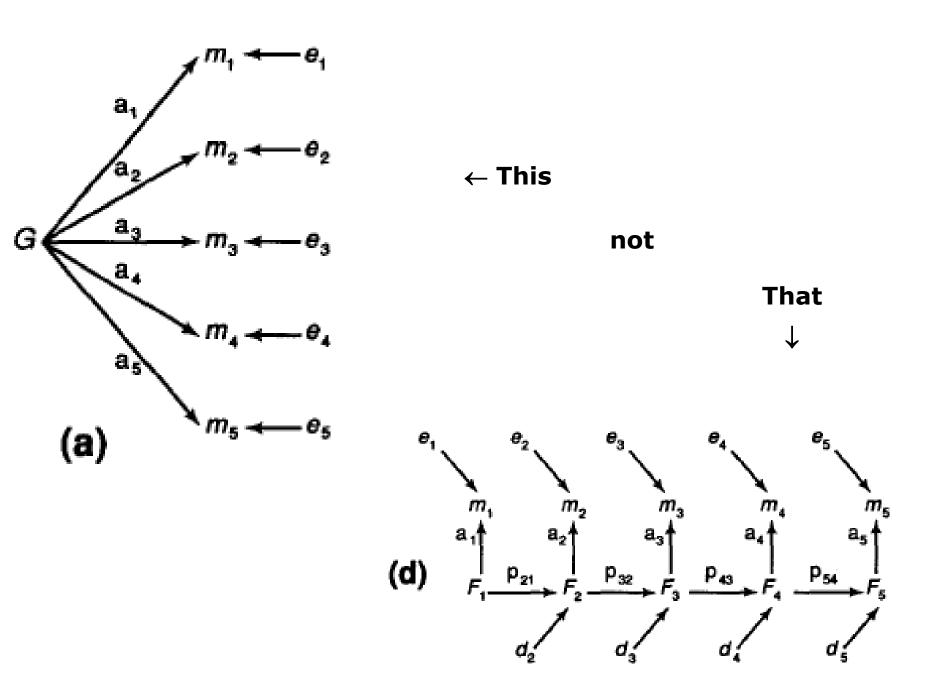
1.	J. S. Bach	26.	Machaut	50.5	Fauré	77.	Praetorius
2.	Beethoven	27.	Sc'ıütz	52.	Dowland	77.	Borodin
3.	Mozart	28.	Liszt	53.	C. P. E. Bach	77.	Gounod
4.	J. Haydn	29.	Mussorsky	54.	Rimsky-Korsakov	79.	M. Haydn
5.	Bra'ms	30.	Corelli	<i>5</i> 5.	Perotinus	80.5	Sousa
6.	Handel	31.	D. Scarlatti	56.	Wolf	80.5	Sullivan
7.	Debussy	32.	Gabrielli	57 .	Bartók	82.5	Bellini
8.	Schubert	33.	Couperin	58.	Grieg	82.5	Janáček
9.	Wagner	34.	Gluck	59.	Weber	85.	Donizetti
10.	Chopin	35.	Puccini	60.	Gibbons	85.	Webern
11.	Monteverdi	36.	Franck	61.	Sweelinck	85.	Willaert
12.	Palestrina	37.	Dvořák	62.	Schoenberg	87.	Offenbach
13.	Verdi	38.	Buxtehude	63.	J. Strauss, Jr.	88.5	Ravel
14.	Schumann	39.	Bruckner	64.	Saint-Saëns	88.5	Delius
15.	dés Pres	40.	Sibelius	65.5	Telemann	91.	Elgar
16.	de Lassus	41.	Rameau	65.5	Lulli	91.	Hindemith
	Purcell	42.	Frescobaldi	67.	Landino	91.	Satie
17.5		43.	Okeghem	68.	MacDowell	93.5	Cherubini
19.	R. Strauss	44.	Stravinsky	69.	J. C. Bach		Foster
20.	Mendelssohn	45.	A. Scarlatti	70.	Leoninus	95.	de Rore
21.	Tchaikovsky	46.	Dunstable	71.	A. Gabrieli		Boccherini
22.	Vivald:	47.	Bizet		Carissmi		Franco of Cologne
23.	Mahler	48.	Gesualdo		Pergolesi		Clementi
24.	Byrd	49.	Rossini	74.	Marenzio		Tartini
25.	Dufay	50.5	de Victoria	75.	Smetana	(The	next 4 are tied)

Note. Adapted from Farnsworth (1969, 228). Copyright 1966 by Music Educators National Conference. Adapted by permission.

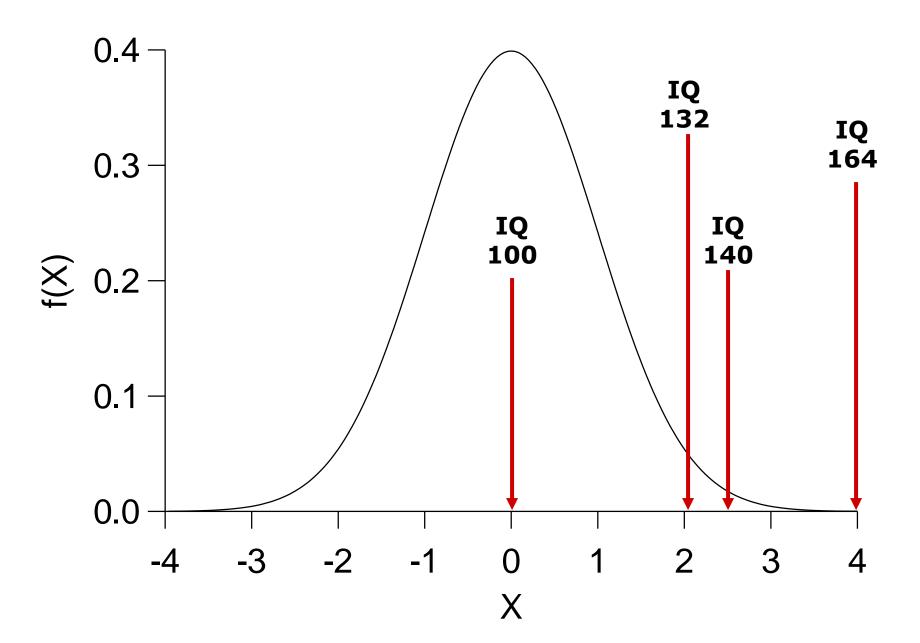
TABLE I: RELATIVE FREQUENCIES OF OCCURRENCE OF COMPOSER'S WORKS IN MUSIC PERFORMANCES

ş	No.	Composer	p_c	No	. Composer	p_c
			per cent			per cent
		Mozart	6.1	40	Couperin	0.65
	2	Beethoven	5.9	41	Mahler	0.6
. P.1	3	Bach	5.9	~42	Rameau	0.6
5.5	4	Wagner	4.2	43	St. Saens	0.6
1137	5	Brahms	4.1	44	Massenet	0.6
CHIL	6	Schubert	3.6	45	Donizetti	0.55
257		Handel	2.8	46	De Falla	0.45
<i>∞</i> 53		Tchaikovsky Verdi	2.8	47	Scriabin	0.45
801		, 0101	2.5	48	Meyerbeer	0.45
	10	Haydn	~ 2.3	49	Gluck	0.45
		Schumann -	2.1	50	Paganini	0.45
	12	Chopin	2.1	51	Milhaud	0.45
		Liszt — VA Mendelssohn	1.75	52	Bartok	0.4
		Mendelssohn	1.75	53	Borodin	0.4
417		Debussy	1.7	- 54	Bruckner	0.4
5° - 5*		Wolf	1.65	55	Vivaldi	0.4
TIV O	17	Sibelius	1.6	56	Elgar	0.4
12:4		R. Strauss	1.4	57	Mascagni	0.4
11111		Moussorgsky	1.3	58	Offenbach	0.35
4 48 (5 7		Dvořak	1.3	59	Palestrina	0.35
		Stravinsky	1.3	60	Monteverdi	0.35
7		Fauré	1.2	61	Shostakovitch	0.35
4401		J. Strauss	1.2	62	Schönberg	0.35
: ما ر	24	Smetana	1.1	63	Walton	0.35
		Rachmaninoff	1.0	64	Honegger	0.35
0 0		Purcell	1.0	65	Albéniz	0.3
1.6	27	Puccini	1.0	- 66	Buxtehude	0.3
9.04	28	Grieg	0.95	67	Chabrier	0.3
	29	Weber	0.95	68	Delius	0.3
	30	Prokofiev	0.95	69	Gershwin	0.3
	31 .	Berlioz	0.95	70	Lully	0.3
617	32	Rossini	0.95	71	Suppe	0.3
000	33	Ravel	0.95	72	A. Thomas	0.3
1. O.L.	34	Rimski-Korsakov	0.85	73	Bloch	0.25
53 G		D. Scarlatti	0.85		Delibes	0.25
		Franck	0.7	75	Glazounov	0.25
		Gounod		76	Glinka	0.25
		Vaughan Williams	0.7	77	Granados	0.25
\$1.40		Bizet	0.7	78	Gretchaninoff	0.25
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.65	79	Khatchaturian	0.25





- Definitions
 - Humanistic Conceptions
 - Roman Genius
 - Romantic Genius
 - Scientific Measurement
 - Historiometric Genius
 - Psychometric Genius



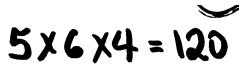
- Manifestations
 - Outstanding Creativity
 - Artistic Genius
 - Scientific Genius

- Manifestations
 - Outstanding Creativity
 - Exceptional Leadership
 - Military Genius
 - Political Genius
 - Business Genius
 - Religious Genius

- Manifestations
 - Outstanding Creativity
 - Exceptional Leadership
 - Extraordinary Performance
 - Chess Genius
 - Virtuosic Genius
 - Prodigious Genius
 - Sports Genius

Is Genius Generic?

- General Intelligence or Multiple Intelligences?
 - Unified Intellect:
 - □ Terman
 - Diverse Intellects



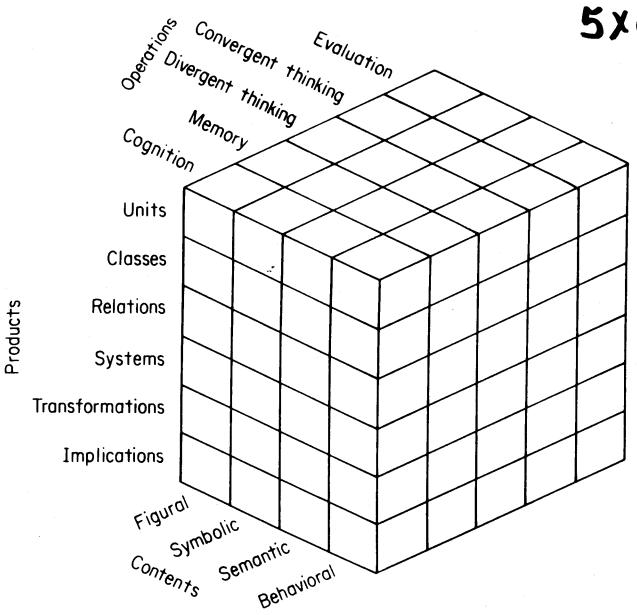


FIGURE 9-2 A cubical model representing the structure of intellect (Adapted from Guilford, 1967.)

Sternberg

- Analytical intelligence
- Creative intelligence
- Practical intelligence

GARDNER'S 7 INTELLIGENCES

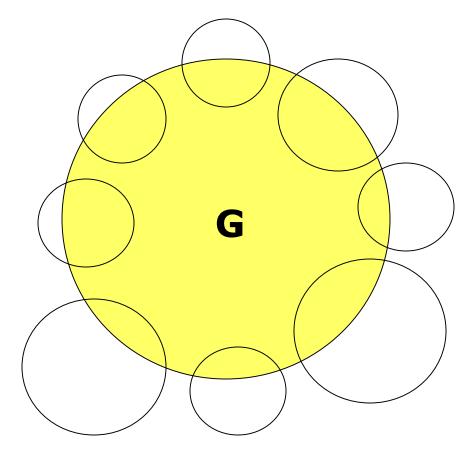
- Linguistic
- Logical-mathematical
- □ Spatial
- Bodily-kinesthetic
- Musical
- Intrapersonal
- Interpersonal

- □ T. S. Eliot
- □ Einstein
- □ Picasso
- Martha Graham
- Stravinsky
- □ Freud
- □ Gandhi

Is Genius Generic?

- General Intelligence or Multiple Intelligences?
 - Unified Intellect: Terman
 - Diverse Intellects: Guilford, Sternberg, and Gardner
 - Hierarchical Intellect: Spearman et al.

Spearman's *G* (plus specific factors)



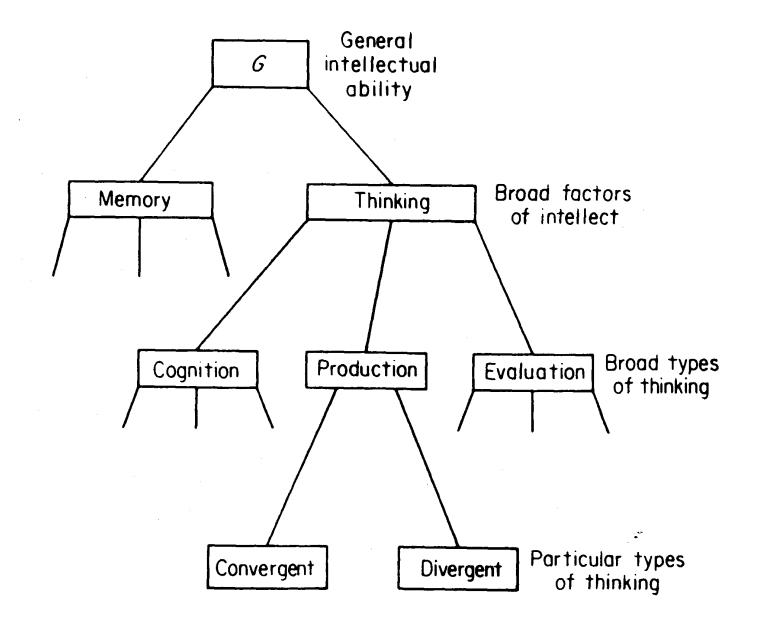


FIGURE 9-4 A hierarchical model for factors of intellect (Adapted from Guilford, 1959.)

Domain-Specific Expertise or General Problem-Solving Techniques?

- Algorithms versus Heuristics
 - Expert Systems versus Discovery Programs
 - Knowledge-Based versus Brute-Force Chess Programs
- □ Resolution: Darwinian Creativity
 - The BVSR Model
 - Intra- and Inter-Domain Application

Is Genius Born or Made?

- Nature Position
 - Galton's (1869) Hereditary Genius
- Nurture Position
 - Candolle's (1873) Histoire des sciences et des savants depuis deux siècles
 - Galton's (1874) English men of science: Their nature and nurture.
 - Watson's Conditioning to Ericsson's Deliberate Practice

Is Genius Born or Made?

- Nature Position
- Nurture Position
- Modern Position
 - Environmental effects
 - ☐ Shared environment (e.g., SEC)
 - □ Nonshared environment (e.g., birth order)
 - Genetic effects
 - Additive (gene-environment interactions)
 - Multiplicative (emergenesis)

Is Genius Mad?

- Empirical Findings
 - Historiometric Results

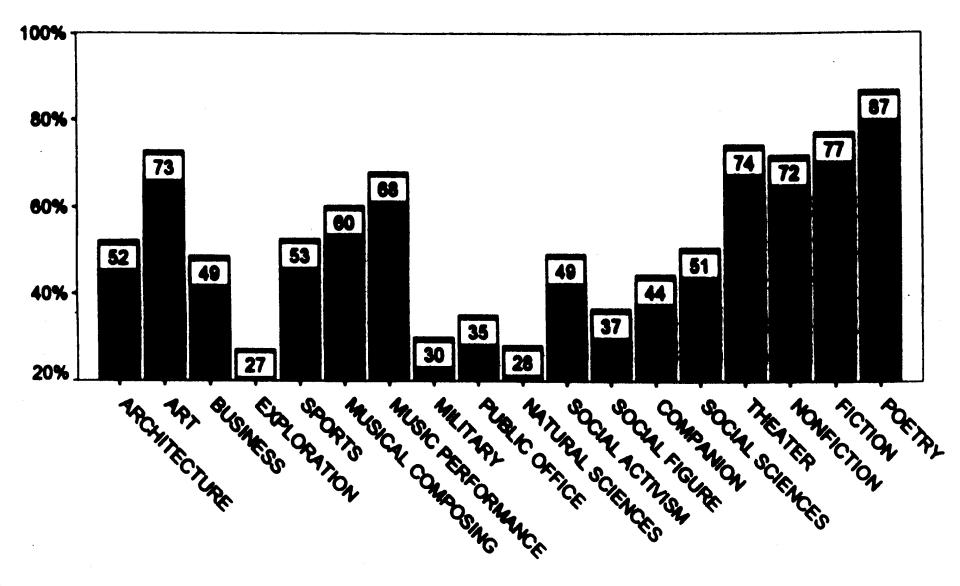
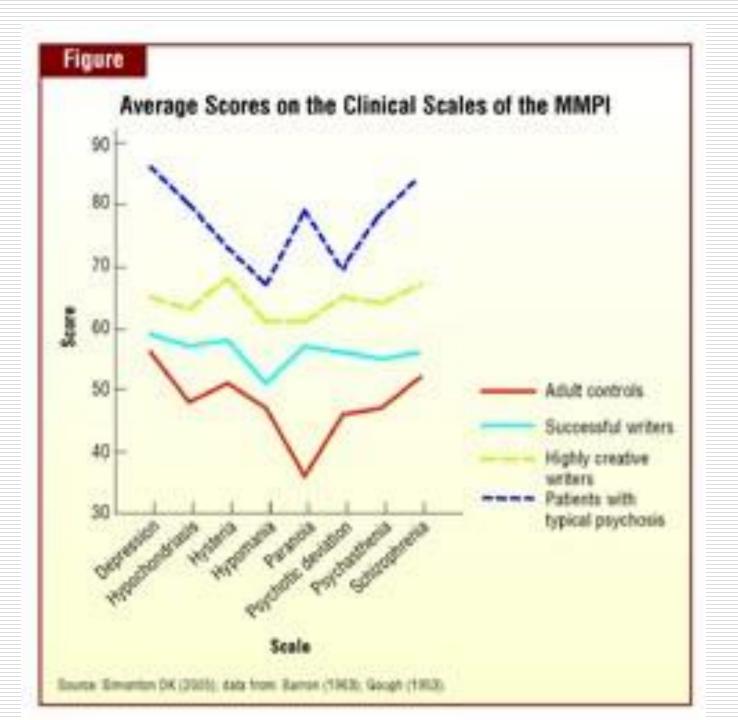


Figure 7.8. Lifetime rate of any mental disorder.

Is Genius Mad?

- Empirical Findings
 - Historiometric Results
 - Psychiatric Results
 - Incidence rates and intensity levels
 - □ Family pedigrees
 - Psychometric Results



Is Genius Mad?

- Empirical Findings
 - Historiometric Results
 - Psychiatric Results
 - Psychometric Results
- Theoretical Interpretations
 - Shared Causes
 - Directional Causality
 - M > G
 - □ G > M

Is Genius Individual or Collective?

- Intellectual Stimulation
- □ Interpersonal Relationships
- Collaborative Groups
- Disciplinary Context
- Sociocultural Zeitgeist

Where Will Genius Science Go?

- Social Psychology: Gender and Ethnicity
- Developmental Psychology: Age and Achievement
- Educational Psychology: Giftedness and Talent
- Differential Psychology: Intelligence and Personality
- Cognitive Psychology: Brain and Mind