Human Intelligence

This book is a comprehensive survey of our scientific knowledge about human intelligence, written by a researcher who has spent more than thirty years studying the field. It takes a nonideological view of a topic in which, too often, writings are dominated by a single theory or social viewpoint. The book discusses the conceptual status of intelligence as a collection of cognitive skills that include, but also go beyond, those skills evaluated by conventional tests; intelligence tests and their analysis; contemporary theories of intelligence; biological and social causes of intelligence; the importance of intelligence in social, industrial, and educational spheres; the role of intelligence in determining success in life, both inside and outside educational settings; and the nature and causes of variations in intelligence across age, gender, and racial and ethnic groups.

Earl Hunt is Professor Emeritus at the University of Washington, where he has been a faculty member since 1966. He has also taught at Yale; the University of California, Los Angeles; and the University of Sydney, Australia. His other books include *Concept Learning* (1962), *Experiments in Induction* (1966), *Artificial Intelligence* (1975), *Will We Be Smart Enough?* (1995), *Thoughts on Thought* (2002), and *The Mathematics of Behavior* (2007). He has received the International Society for Intelligence Research's Lifetime Achievement Award for his contributions to the study of intelligence and has been named the 2011 recipient of the Association for Psychological Science's Cattell Award for lifetime contributions to applied psychological research.

Human Intelligence



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Contents

List of Figures List of Tables Introductory Remarks		<i>page</i> vii xi xiii
1	The Issue of Intelligence	1
2	The Tests	31
3	On Theory	64
4	Psychometric Theories	79
5	Taking Intelligence Beyond Psychometrics	111
6	The Mechanics of Intelligence	140
7	Intelligence and the Brain	172
8	The Genetic Basis of Intelligence	203
9	Environmental Effects on Intelligence	257
10	What Use Is Intelligence?	311
11	The Demography of Intelligence	356
12	Summary and Prospectus	448
References Author Index Subject Index		453 485 494

List of Figures

1.1.	The Bell Curve	page 9
1.2.	Survival rates for individuals in the upper and lower quartiles of the	
	intelligence distribution, shown separately for men and women	15
1.3.	The Hunt and Carlson model of the development of intelligence	19
1.4.	Intelligence and socially relevant behavior	23
1.5.	The concept of reaction range	25
1.6.	Interactions between reaction ranges and environmental quality	26
1.7.	The system of variables influencing the development of intelligence during	
	the school years	29
2.1.	The four major lobes of the cerebral cortex	37
2.2.	Two progressive matrix items	47
2.3.	An example of a visual-spatial reasoning problem	49
2.4.	College/university graduation rates as a function of a student's SAT scores	59
3.1.	Genetic and environmental influences on intelligence	67
3.2.	Direct and indirect influences on reading	69
3.3.	Levels of theories of intelligence	71
4.1	A hypothetical example illustrating factor analysis	81
4.2.	The first and second factors in the hypothetical example	82
4.3.	Correlated factors extracted from the hypothetical example	83
4.4.	A model for the confirmatory factor analysis example	85
4.5.	A general factor model for Spearman's data	91
4.6.	Spearman's general and specific factor model applied to a hypothetical	
	test battery	92
4.7.	A hierarchical model applied to the hypothetical battery	93
4.8.	The structure of the second-stratum and third-stratum abilities in	
	the WJ-III test	100
4.9.	The railroad passing problem	105
		vii

viii	LIST OF FIGURES	
	Σ <i>τ</i> , , , , , , , , , , , , , , , , , , ,	C
4.10.	Vernon's structure of intelligence model	100
4.11.	The structure of Johnson and Bouchard's VPR model	107
5.1.	The relation between underlying traits, social constraints, test scores,	
~	and socially relevant behaviors	114
6.1.	The blackboard model of cognition	144
6.2.	The inspection time paradigm	152
6.3.	A progressive matrix item of intermediate difficulty	161
6.4.	A visual closure task	169
6.5.	A rotation problem	169
7.1.	A sketch of the human brain, seen from the left	174
7.2.	The cingulate gyrus and the limbic system	175
7 · 3·	A sketch of areas of the brain that show activity during a variety	
	of tasks involving working memory	191
7.4.	Broca's and Wernicke's regions on the left side of the brain	193
7.5.	Areas that have shown activation during selected reading tasks	194
7.6.	The dorsal and ventral visual streams	194
7·7·	Regions of the brain activated within a single individual when that person	
	was instructed to solve a sentence comprehension problem using either a	
	verbal or a visual imagery strategy	197
7.8.	The relation between brain systems and broad (second-stratum)	
	psychometric abilities	199
7.9.	Hypothetical relationships between brain systems, narrowly defined	
	information-processing functions, working memory, and general reasoning	
	ability (g)	201
8.1.	A simple illustration of Mendelian genetics	206
8.2.	The effect of evolutionary selection on the distribution of genotypes	209
8.3.	The distribution of phenotypes with independent environmental effects	211
8.4.	Probabilities for IQ potential (ordinate) as a function of the value of the	
	genotypic potential	214
8.5.	The relationship between genetic and environmental contributions in	
	a single individual	221
8.6.	A model of the relation between genetic and environmental effects	
	in two individuals, i and i'	222
8.7.	The ACE model	226
8.8.	Percentage of the variance in intelligence test score accounted for by additive	
	genetic influence, shared environmental influence, and nonshared	
	environmental influence	233
8.9.	A schematic of genetic correlations involving the P and R factors in	
	the VPR model of intelligence	237
8.10.	The relative proportions of variance associated with genetic and	
	environmental variance in the factors defined for the g-VPR model	238
8.11.	Heritability estimates for three academic skills	240
8.12.	The reshuffling of genetic material in meiosis	246
9.1.	The design of a hypothetical experiment demonstrating how the development	
	of cognition may depend on environments that encourage exploration	259
9.2.	Scores on the Army Alpha Test obtained by World War I soldiers, World	
	War II soldiers, and literate World War I soldiers	263
9.3.	The increase in three dimensions of intelligence over cohorts, using the 1903	-
	birth cohort as a base	264
9.4.	Progressive matrix test scores for eighteen-year-old Danish men registering	
	for military enlistment, 1958–98	267

CAMBRIDGE

	LIST OF FIGURES	ix
9.5.	The fraction of variance in WISC scores predictable from measures of SES and home environment	288
9.6.	Mean IQ scores obtained by the participants in the ABCDerian project and in a randomly chosen control group	291
9.7.	Mean intelligence estimates of young children born to mothers who were in the NLSY70 survey	203
9.8.	The relation between number of children and maternal intelligence score (AFOT percentile score) in the NLSY70 data set	204
9.9.	The birth order effect appears in families where a child becomes the oldest due to the death of an elder sibling	294
9.10.	The path diagram for a study showing the influence of education	295
0.11	A problem similar to the problems presented in K-2 mathematics textbooks	299
0.12.	Abacus training improves intelligence test scores	202
0.12.	A cartoon rendition of Posner and Rothbart's attention training task	305
10.1.	Percentage of white young adults in the NLSY79 survey who did not)
	complete high school, plotted as a function of their percentile scores	
	on the AFQT	320
10.2.	The distribution of RSPM scores across grades in a representative sample of	
	500 Icelandic schoolchildren	321
10.3.	Test accuracy and rejection rate interact to produce quality acceptances	325
10.4.	Median weekly earnings in 2008 as a function of level of education	326
10.5.	Correlations between predictors and criterion measures in the U.S. Army	
10.6	study of enlisted performance	330
10.0.	intelligence, and a variety of other assessment measures	221
10.7	Predicting square root income (SORT INCOME) and occupational prestige	331
10.7.	(SEI) in 1005 from educational attainment (in years) and AFOT score	
	obtained in 1980	337
10.8.	Correlations and multiple correlations between income (top) and))
	occupational status (bottom) and general intelligence and educational level	339
10.9.	Recommended GATB cut points for four occupations	340
10.10	. The ninetieth, fiftieth (median), and tenth decile of incomes in various	
	occupations, plotted as a function of the imputed intelligence demands	
	for the occupation	341
10.11	Educational attainment of participants in the SMPY, by age thirty-three	347
10.12	The SMPY participants compared to graduate students of the same age	348
10.13	. Attrition rates during basic training (percentages) for Project 100,000	
10.14	The advancement in rank of Project too ooo personnal	352
10.14	An illustration of the overlap between distributions	353
11.2.	Broad Cognitive Ability (BCA) factor scores as a function of age	268
11.2.	Age and change scores for Gf and Gc	369
11.4.	A stylized picture of the age trends for different broad second-level traits) /
·	in the Gc-Gf model of intelligence	370
11.5.	Cumulative age changes from age twenty-five for three different aspects	
	of intelligence	371
11.6.	Reaction times lengthen with age	372
11.7.	Changes in the level of a generalized cognitive trait (g) over the second half	
	or the life span	373
11.ð.	Scores on a test of basic living skills, measured on two different occasions	374

X	LIST OF FIGURES	
11.9.	The distribution of CAT mean scores in a British sample of more than	
	300,000 eleven-year-old schoolchildren	383
11.10.	The effect of small differences in means and variances on the distribution of scores at various points on the d scale	285
11.11.	Male-female differences in d unit for selected subtests of the Differential	5 ° <i>)</i>
	Aptitude Battery	388
11.12.	Johnson and Bouchard's model of general intelligence plus two bipolar factors	- 9 -
11.12.	Illustrations of two spatial-visual reasoning tasks on which men tend to	309
	outperform women	389
11.14.	Detecting details in a complex picture	390
11.15.	Male-female differences on various educational tests of reading and	
11.16	The difference between male and female scores on three of the 2002 PISA	392
11.10.	examinations	393
11.17.	Mean scores of fifteen-year-old students in selected countries on the PISA	,,,,
0	2003 tests of mathematics, science, and general problem solving	394
11.18.	Mean SAT mathematics scores for men and women, from 1988 to 2008 The relation between SAT mathematics scores, grades (A, B, C, D, F), and	395
11.19.	gender in three levels of college courses	396
11.20	The percentages of women among the recipients of doctoral degrees, 1977	,,
	and 2007	398
11.21.	Raven Progressive Matrices scores in a school district in the western United	415
11.22.	The median number of Raven's Standard Progressive Matrices problems	413
	solved by Native American, Mestizo, and White children in Mexico	413
11.23.	Median number of problems solved as a function of age and ethnicity	414
11.24.	The difference between White seventeen-year-olds and African American and Hispanic seventeen-year olds on the NAFP mathematics test	418
11.25.	White. African American, and Hispanic mean scores on the SAT	410 410
11.26	Difference in deviation score units between Black and White students' scores	177
	on achievement tests taken in the second and twelfth grades	419
11.27	SAT scores for three racial/ethnic groups for the period 1997–2007	422
11.20	to predict the Black-White contrast on tests of cognitive skills	420
	· ·	

List of Tables

11	The distributions of standard and IO scores	trade 8
2.1	The subscales of the Wechsler Adult Intelligence Scale–IV	25
2.1.	The subtests of the Kaufman Adult Intelligence Test	26
2.2.	The subtests of the Cognitive Assessment System	28
2.4	The Otis-Lennon test of School Abilities	3° 40
25	The scales and subtests of the Cognitive Abilities Test-2	т° 41
2.6	The subtests of the SAT-I	42
2.0.	The subtests of the Armed Services Vocational Aptitude Battery (ASVAB)	4 ~ 42
2.8	Sample questions illustrating the Wonderlic Personnel Test revised edition	45
4.1.	Variance-covariance matrices in the confirmatory factor analysis sample	85
4.2.	The correlation matrix for Spearman's data	00
1.2.	Abilities identified in the Cattell-Horn-Carroll three-stratum theory	101
т·у· 4.4.	The g loadings of the second-stratum factors on the WJ-III test	103
5.1.	Examples of tasks used by Sternberg and his colleagues to assess practical	
)	intelligence	123
5.2.	Selected data on the relation between knowledge and intelligence test)
)	scores and age	122
6.1.	Correlations between different visual-spatial abilities	166
6.2.	Loadings of visual-spatial and imagery first-order factors on a general	
	visual-spatial reasoning factor	167
8.1.	Genotypes and associated IQ potentials for the (artificially simple) case of	
	two genes affecting intelligence	214
8.2.	Correlations and heritability estimates for pairs of individuals of various	1
	degrees of relationships	227
9.1.	Levels of blood lead concentration in children, together with	/
/	recommended actions	282

xii	LIST OF TABLES	
9.2.	Mean IQ scores of adopted children as pre-schoolers and as adolescents, compared to scores of biological children of the adopting family	285
9.3. 10.1.	Mean WISC-R scores as a function of SES of birth and adopting parents Correlations between tests used for college/university selection, the ASVAB	286
10.2.	general factor or AFQT, and Raven's Advanced Progressive Matrices Odds ratios comparing probability of graduation for the top and bottom	322
	halves of admission test scores in an entering population of post-graduate students	328
10.3.	Cognitive skills assessed in USAAF aviation cadets, shown by occupation followed after WW II	335
10.4.	Correlations between AFQT scores obtained at ages sixteen to eighteen and measures of social outcomes when the participants were in their early thirties	336
10.5.	Gottfredson's examples of intelligence levels (on IQ scale) associated with different occupations and techniques of information processing	328
10.6.	Percentages of men and women in the Terman study who attained various levels of education	344
10.7.	Family income distribution of Terman study participants in the 1950s, compared to "urban white families" at that time	245
10.8.	Attrition rates during basic training (percentages) for Project 100,000 participants and for the service as a whole broken down by military branch	251
11.1.	Ages at peak value and rate of decline for selected factors evaluated by the WI-R test	260
11.2.	Selected scores and male-female comparison for brother-sister pairs in the NLSY70 data set	270
11.3.	Male-female standard deviation unit (d) scores for effect size for different aspects of intelligence	287
11.4.	Values of (White mean–African American mean) and (White mean–Latino mean) in standard deviation units for a variety of cognitive tests	2°7
11.5.	Correlations between IQ estimates and selected indices of national well-being	4-2
11.6.	Squared correlations and partial correlations between target variables	450
		441

Introductory Remarks

After spending some thirty years studying human intelligence, I decided to write a book. Why? It must be that I have something new to say.

Well, I do and I do not. Virtually everything that could be said about human intelligence has been said. It is or isn't important, it is or isn't evaluated by the tests, it is or isn't genetically based, and on and on. This book does not say anything that has not already been said. It could not. What it does do is attempt to bring up to date the information on the various conflicting views. My contribution is to moderate these views, because I do not think that any of the extreme statements that have been made can be supported.

There is a saying that has been traced back to the days of classic Greece;

The fox knows many little things; the hedgehog knows one big thing.

It is not entirely clear what that means, but some philosophers have interpreted it as saying that some people summarize issues with detailed, nuanced views, while others make bold, simple statements. I am a fox. I think the field of human intelligence has had far too many hedgehogs. There are major individual differences in cognitive power; these differences have important implications for human behavior; they do not have a single cause, nor do they ever act outside of the context of the current problem. We need to understand intelligence in its full complexity.

Intellectual foxes have a problem. They are more likely to be right than intellectual hedgehogs (there is actually data on this!), but they are less likely to be believed (there is data on this, too). Nevertheless, being a fox, there is nothing I can do but try to locate the burrows of as many intellectual hedgehogs as I can, and try to dig them out. It is my nature, and that is what I have tried to do. Complete intellectual objectivity is impossible to achieve. I have tried to present as fair a picture as I can of a much-studied, muchdebated topic. The result is a book that may sometimes be difficult to read, but I hope that it is a comprehensive presentation.

Any effort of this sort is impossible unless you receive support. My first and greatest

xiv

INTRODUCTORY REMARKS

debt is to my wife, Mary Lou Hunt, who has put up with years of papers scattered all over the house, a somewhat grumpy husband, and mutterings as I uncovered the tracks of one or another of those intellectual hedgehogs.

My second debt is to Cambridge University Press, which put up with my being late, late, late, but let me persevere. I also owe a special debt to Jeanie Lee, for her substantial assistance in ensuring that permissions for reproduction were obtained. Too many books on intelligence wave words at the reader about what the data said. Thanks in no small part to Ms. Lee's assistance, this book will often let the reader see what actually was found.

I owe favors to colleagues around the world who were willing to read prepublication versions. Special thanks go to Tom Bouchard Jr., who engaged me in lively e-mail discussions over virtually every chapter; to two of my sons, Alan and Steven, who discussed and commented on different topics (very different – Alan's a biophysicist and Steve an industrial-organizational psychologist); to Wendy Johnson of the University of Edinburgh for her comments on genetics; and to Diane Halpern, for comments on the introductory chapters. Naturally, I am responsible for everything in the final product!

And I suppose I owe an apology to all those authors whose works I should have read but did not. All I can say is that life is short and there are an awful lot of you.

> Bellevue, Washington April 2010

Human Intelligence