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INTELLIGENCE

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Editor: Douglas K. Detterman

Special Issue

Intelligence and Social Policy

Linda S. Gottfredson, Guest Editor

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INTELLIGENCE

STATEMENT OF PURPOSE

The Journal Intelligence publishes papers reporting works which make a substantial contribution to an understanding of the nature and function of intelligence. Varied approaches to the problem will be welcomed. Theoretical and review articles will be considered, if appropriate, but preference will be given to original research. In general, studies concerned with application will not be considered appropriate unless the work also makes a contribution to basic knowledge.

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Editor's Note

This special issue of *Intelligence* was edited by Linda S. Gottfredson. The articles were invited but were put through the peer review process. The issue was planned as an informative extension of the collective statement, "Mainstream Science on Intelligence," which was published in the *Wall Street Journal* in December 1994, and which is reprinted here as an editorial.

I asked Dr. Gottfredson to guest edit this special issue because of her role in organizing the "Mainstream" statement. That statement was designed to be a clear explication of what we in the field regarded as well-known despite popular opinion to the contrary. The statement was effective and had some impact on popular opinion. I thought, however, that it should be followed by a more detailed account that would provide a source of references for its assertions. Dr. Gottfredson agreed and took on the editing of this issue. She has done an excellent job. The issue has developed into more than just an elaboration of the "Mainstream" statement. With an impressive panel of authors, it has extended the boundaries of the field of intelligence, showing more compellingly than ever how intelligence affects the lives of individuals and societies. Even those who know the field well will find much of interest.

Most readers of *Intelligence* are familiar with the work of Linda Gottfredson. I think her greatest contribution has been showing the relevance of basic research on individual differences to the concerns of applied psychologists and policy makers. She has been a tireless commentator on issues of test use and test fairness.

Dr. Gottfredson is currently professor of educational studies at the University of Delaware and co-director of the Delaware-Johns Hopkins Project for the Study of Intelligence and Society. She obtained her doctoral degree from Johns Hopkins University in sociology and her bachelor's degree in psychology from the University of California at Berkeley. Guest editing is not new to her. She edited two special issues of the *Journal of Vocational Behavior* which considered the relationship of intelligence to employment testing and to fair testing practice. I regard them, like the current issue, as required reading for anyone who is interested in intelligence and its implications for social policy.

—Douglas K. Detterman

Foreword to "Intelligence and Social Policy"

LINDA S. GOTTFREDSON
University of Delaware

This special issue of *Intelligence*, "Intelligence and Social Policy," aims to build a bridge between inquiry on intelligence and scholarship on social policy. Policy analysts need to realize that research on intelligence is far more relevant to their concerns, but in different ways, than they may have ever imagined. By the same token, this volume encourages more policy-relevant research among fellow intelligence researchers by illustrating how they might illuminate some of the most vexing social issues of our time.

The journal issue is devoted, not to making policy prescriptions, but to exploring the constraints that differences in intelligence may impose in fashioning effective social policy. All societies are characterized by wide disparities in intelligence or IQ "bell curves." The details of that dispersion differ across time and place, but wide dispersion is an enduring feature of human populations. Research on intelligence has always asked "why the dispersion?" and "with what effects?" Accumulated research has considerably narrowed the range of possible answers to those questions. It also shatters enough presumptions on all sides of past debates to suggest that no one, neither liberals nor conservatives, neither hereditarians nor environmentalists, have been on the right track. Shedding the false but familiar old assumptions opens a new vista for research and action.

INDIVIDUAL CONTRIBUTIONS

The authors are highly respected contributors to the scholarly literature on intelligence. They were invited to contribute to this volume because all are staunch empiricists and independent thinkers who have examined the role of intelligence in some aspect of social life. They were also selected for their variety in disciplinary affiliation (behavioral genetics, psychology, sociology) and substantive focus (education, employment, crime, health). Their articles are challenging and necessarily technical in places, but all continue to offer new insights with rereading.

The volume begins with an editorial, "Mainstream Science on Intelligence," signed by 52 experts in the study of intelligence. Written for eventual publication in this journal, the statement first appeared in the *Wall Street Journal* in December

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1994. It outlines 25 basic conclusions that intelligence experts consider to be mainstream in the field. These conclusions are quite different from what the most vocal commentators on the field have led the public to believe. The statement is accompanied by an account of how it was produced and an analysis of the political and other reasons why some experts declined to sign it. Together with its bibliography of key books since 1980, the statement constitutes a primer for those wishing to become acquainted with the riches of this highly interdisciplinary realm of inquiry.

The first two articles review research in psychometrics and behavioral genetics, two classic areas of study on intelligence that are particularly pertinent to policy analysis. Both areas concern the nature of differences among individuals. The former provided the earliest important discoveries about intelligence and the latter has provided the most recent. The authors, who are leading authorities in these two fields, describe the logic and data supporting their fields' major conclusions. Both are careful to outline the limits of knowledge and key unresolved questions.

In "Psychometrics, Intelligence, and Public Perception," psychologist John B. Carroll examines six of *The Bell Curve's* (Herrnstein & Murray, 1994) central claims about the nature, measurement, and malleability of intelligence. All have been widely disputed in public discourse, but are no longer matters of much debate among experts on intelligence. Carroll shows how research substantiates the six claims, which are that: (a) there is a general factor *g* of intelligence on which individuals differ (b) that is measured to some degree by most cognitive tests, (c) without cultural bias, and (d) which is basically stable over the life span, (e) is substantially influenced by genetic factors, and (f) corresponds to most people's conceptions of intelligence. In the process, Carroll illustrates how factor analysis provides a measure of *g* and how mental tests are constructed to measure childhood and adult intelligence. He concludes by discussing how the field's struggles with core ideas and its failure to probe the real-life meaning of intelligence have contributed to public misunderstanding of its findings.

In "Genetics and Intelligence: What's New?" behavioral geneticists Robert Plomin and Stephen A. Petrill describe how behavioral genetics has moved far beyond the rudimentary "nature vs. nurture" question upon which public controversies on intelligence still focus. Newer and more sophisticated analyses look, for example, at how genes contribute to both continuity and age-to-age change in mental development and at the degree to which the correlation between attributes (e.g., between intelligence and school achievement) reflects a common genetic source. The authors stress that behavioral genetics is a powerful tool for studying environments, and they illustrate how it has turned some traditional assumptions upside-down. For instance, two counterintuitive findings are that environmental effects on intelligence do not cumulate over the life span, but rather diminish, and that they create lasting differences, not similarities, among siblings in the same family. Plomin and Petrill conclude by describing advances in molecular genetics

which will make it possible to identify the genes responsible for genetic influences on mental abilities and disabilities.

The next four articles deal more explicitly with the policy relevance of intelligence research. Each draws primarily on theory and methods in different fields (respectively, personnel psychology and psychometrics; behavioral genetics; epidemiology and differential psychology; and sociology, survey research, and psychometrics) in order to illuminate the practical import of either genotypic or phenotypic intelligence.

In "Why *g* Matters: The Complexity of Everyday Life," sociologist Linda S. Gottfredson counters the widespread misperception that "intelligence is merely a narrow academic ability" by describing the practical advantages conferred by higher levels of intelligence in different arenas of social life. Drawing on analyses of specific job duties and everyday tasks, she illustrates how those advantages range from small to large depending on the cognitive complexity of the activities involved (e.g., their number, variety, ambiguity, novelty, unpredictability). Probabilities of good outcomes rise with IQ, although less steeply for some outcomes (marriage, being employed) than others (high school graduation, high-level job). Arraying such probabilities across five ranges of the IQ distribution shows that people of low to very low IQ face very different challenges in life than do people of average or higher IQ. Gottfredson concludes by examining trends in the supply and demand for national intelligence and considering how to reduce the risks faced by individuals with below-average intelligence, especially as unskilled jobs disappear from modern economies.

Psychologist and behavioral geneticist David C. Rowe, in "A Place at the Policy Table? Behavior Genetics and Estimates of Family Environmental Effects on IQ," illustrates how behavioral genetic evidence is pertinent to two major social policy concerns. First, how much can we boost intelligence by improving the family circumstances in which children are reared? (Probably relatively little.) Second, are ethnic and racial differences in IQ partly genetic in origin? (Perhaps somewhat.) While not yet providing definitive answers, Rowe shows how behavioral genetics has the tools for providing them. In doing so, he explains why two popular theories that undergird much social policy are mistaken: "passive exposure theory" (that IQ is the sum total of learning, which in turn results from passive exposure) and "family effects theory" (that differences in IQ are due primarily to differences in family environments, such as parental vocabulary and social class). The two theories are false, among other reasons, because genes not only affect our ability to exploit environments (e.g., to learn from exposure), but also "drive experience" itself (by affecting the environments parents create for their children and that children choose for themselves).

Psychologists David Lubinski and Lloyd G. Humphreys demonstrate, in "Incorporating General Intelligence into Epidemiology and the Social Sciences," how intelligence is a robust empirical phenomenon that can be reliably measured

in different and perhaps surprising ways. They argue that so much is known about the involvement of intelligence in well-being and pathology that social scientists and epidemiologists violate the commonsensical "Total Evidence Rule" in the philosophy of science when they do not routinely include intelligence in their research. The authors try to facilitate its inclusion by, first, demonstrating how to graph for policy makers the practical importance of intelligence. Second, they show how to mine demographic data to determine whether the conspicuous demographic differences among individuals (e.g., race, sex, social class) to which disparities in health and pathology are so often attributed are merely poor surrogates for the behaviors or circumstances that actually put people at risk (e.g., health habits, specific abilities or disabilities). And, third, Lubinski and Humphreys provide examples from causal modeling, scale development, and experimental design to show how neglecting intelligence can lead to squandering opportunities for constructive intervention and even to promoting destructive social policy.

In the final paper, "Everyday Life as an Intelligence Test: Effects of Intelligence and Intelligence Context," sociologist Robert A. Gordon traces the mechanisms by which intelligence exerts its effects in society, all the way from the level of individual action to broad cultural change. He begins by comparing the cognitive demands and psychometric properties of daily actions with those of items on intelligence tests in order to explain why casual observation leads people to underestimate the role of intelligence in daily life. Drawing upon this analogy, Gordon details how one's intelligence level changes the odds of making mistakes, cognitive or otherwise (e.g., committing a crime). This individual-level of analysis, Gordon points out, is the only level of intelligence effects that previous research (including *The Bell Curve* and its critiques) has examined.

He next shows how the intelligence level of people in one's near social context (peers, parents, etc.) affects an individual's behavior and opportunities, independent of their own intelligence. As Gordon notes, the interpersonal mechanisms or mediators by which the intelligence context has its effect (giving help [or bad advice], modeling attitudes and behavior) have been treated in research as strictly noncognitive social variables (e.g., "socialization"), thus obscuring the deeper role of intelligence.

Intelligence effects at the individual and contextual levels flow into the third, population level, which Gordon investigates with a novel "population-IQ-outcome" model. Applying the model to crime and delinquency, single motherhood, poverty, HIV infection, conspiracy rumors, and attitudes concerning the O.J. Simpson trial, Gordon shows that Black-White differences in prevalence rates are remarkably commensurate with the IQ parameters (means and standard deviations) of the two populations. These very diverse prevalence rates, which span five decades, seem to trace the outlines of overlapping but separated normal curves. Gordon also uses the occasional failures of his model to uncover social processes (increased sexual permissiveness) and policies (income redistribution) that may blunt the normal effects of IQ differences. He concludes that a society's

distribution of intelligence constitutes a "deeper structure" which coordinates and orchestrates its activities to a surprising degree.

POLICY-RELEVANT THEMES

The authors collectively discuss a wide variety of behaviors and outcomes upon which social policy often focuses, but primarily the noneducational outcomes of crime, employment, poverty, and health. The articles, while being able only to sample the key issues involved, begin to chart how differences in intelligence in a population help to shape social behavior and institutions and to constrain how and how much we can deliberately reshape them.

A more popular view in public discourse is, in contrast, that intelligence sets no limits on the social order because it is merely a product of that social order (e.g., Fischer et al., 1996). This view is typically maintained mostly by appealing to a variety of misconceptions about intelligence. Those misconceptions do nothing, however, to nullify the real-world impact of intelligence. The authors in this special issue have thus sought to promote more constructive discourse by first sweeping away the false terms of debate and then outlining relevant knowledge for policy analysis and fruitful paths of inquiry.

Clearing Away Misconceptions

Carroll lays to rest the most general of misconceptions, namely, that psychometrics is "pseudoscience." He and the other authors expose a variety of more specific falsehoods that are commonly asserted as truisms (accordingly named "falsisms" by Gordon) about either intelligence (e.g., that intelligence is not real, heritable, useful in "real life," or measurable without bias) or intelligence researchers themselves (that they believe intelligence is immutable, all-important, predestines one's fate, and that low-IQ people "can't learn").

The sociopolitical reasons for the spread of misconceptions have been examined elsewhere (e.g., Snyderman and Rothman, 1987, 1988; Gottfredson, 1994). The authors focus here on more substantive reasons. These include the failure of experts to clarify the meaning of intelligence in practical affairs (Carroll, Gottfredson) and the inherent difficulties of recognizing a limited but systematic influence via the unsystematic observations of everyday life (Gordon).

Meaning of Intelligence

Research on intelligence as a property of the mind (information processing, mental self-management) and the brain (speed of neural transmission, brain size, rate of brain metabolism, and the like) constitutes perhaps the most active frontier today in the study of intelligence. While it takes us further into the inner workings of intelligence, as Rowe indicates, there has been no comparable "sociology of intelligence" to explain why and where intelligence is useful in practical, everyday affairs and how its effects reverberate through the social system. This issue's

authors help to fill that void, both by providing social-level definitions of intelligence and by detailing the mechanisms by which it affects behaviors and outcomes.

Carroll conceptualizes differences in intelligence as persistent differences in *rate of learning* from instruction and exposure to the general culture. Rowe similarly describes intelligence as the relative *ability to profit (learn) from exposure*, explaining that some people need to be exposed many times to comprehend material that others grasp quickly. Gottfredson builds from the notion that intelligence reflects differences in the *ability to deal with cognitive complexity* (to process complex information), and Gordon from the idea that intelligence indexes relative *probability of (not) making cognitive errors*. Each conception can be translated into the others (e.g., rate of learning is the time needed to reduce cognitive errors on some task below a certain level). All are helpful in explaining concretely *how* differences in intelligence produce differences in the quality of learning and decision making and thus in odds of success and failure in many tasks.

The papers emphasize that the effects of intelligence are probabilistic, creating continua of risk. As Gottfredson and Gordon explain, the level of risk is also a function of the difficulty of the tasks involved. Just as individuals differ in intelligence, tasks differ in the extent to which they call forth or require high levels of *g* (are "*g* loaded"). Task performance generally depends on multiple factors, but *g* seems always to be one of them. The Lubinski and Humphreys paper and the Gordon paper both describe how this generality of effect, even when small in magnitude, accounts for "indifference of the indicator" (the early finding that surprisingly different kinds of tasks can reliably measure intelligence, if they are sampled in sufficient breadth and number).

As most of the authors discuss, no other ability has been shown to have such generality or pervasiveness of effect as does intelligence. Labeling other abilities and traits as other "intelligences" creates only the appearance, not the reality, of multiple equally useful abilities.

Functional Importance of (Phenotypic) Intelligence

Three papers (Gottfredson, Lubinski and Humphreys, and Gordon) examine different ways of gauging the functional importance of intelligence in the lives of individuals and societies (where it is taken for granted that only the *phenotype* or observed level of intelligence is under discussion). They argue that, while useful for some theoretical purposes, predictive efficiency (e.g., percent of variance "explained") is seldom a useful measure for policy-related purposes. Gottfredson, like Lubinski and Humphreys, notes that correlations that are often dismissed as "trivial" or "small" for intelligence (.2-.4) translate into effect sizes that are routinely considered "moderate" to "large" in the context of employee selection (percent failures in training), educational interventions (average reading improvement), and epidemiology (the link between smoking and cancer). Small changes in large populations can have dramatic social consequences. Gordon also describes how

variables that may account for only a small fraction of the differences among individuals *within* a population (say, in committing a crime or being poor vs. not) can sometimes account for much or all of the average differences *between* populations (in rates of poverty and crime). (Groups may differ substantially on only one causal attribute.)

Gottfredson argues in addition that the functional importance for an individual of being bright or dull is not just a matter of how intelligence level affects single outcomes like education and occupation. Intelligence also operates over a lifetime like a consistent bias—a thumb on the scale of life—that enhances or depresses the individual's odds of success, whether a little or a lot, in virtually *all* of life's endeavors, big and small.

Gordon likewise emphasizes that it is probably the pervasiveness rather than magnitude of individual effects that accounts for why a population's variance in intelligence has such apparently deep influence on its activities and institutions. He argues, in fact, that it is "second-" and "third-order" effects of *g*, which emerge at the contextual and population levels of analysis, that may be the most important for a society. For example, *g*-related racial differences in well-being, pathology, and public opinion provoke strong social and political responses in the United States, whether or not observers trace them to IQ disparities. One societal response toward them in recent decades may have been to increase permissiveness toward unwed parenthood and crime, labeled by Daniel Patrick Moynihan as "defining deviance down." Although such permissiveness reduces the stigma of pathologies disproportionately experienced by Blacks, it is responsible for increases in both unwed parenthood and crime society-wide. As Gordon suggests, such attempts to compensate for racial differences in bell curves or to render them less visible can profoundly change a society's culture.

Second- and third-order effects are not limited to race, but include the evolution of social institutions even in racially homogeneous societies. As Gottfredson notes, the occupational prestige hierarchy common to all developed societies may have risen in response to, and may be maintained by, the large dispersion of intelligence found in all societies.

Effects of Environments on (Phenotypic) Intelligence

Behavioral genetics research (reviewed by Plomin and Petrill and by Rowe) confirms that the environment has important and lasting effects on phenotypic intelligence. However, it also shows that those influences are far different from what either classic "environmentalists" or "hereditarians" had once assumed. Differences in environments do affect intelligence in childhood, but those effects mostly *dissipate* with age. Moreover, as Rowe points out, the effects that dissipate completely by adulthood are precisely those which most social analysts still believe to be the most lasting, namely, family environments that siblings *share* (such as parental social class and parental vocabulary).

Much social policy is aimed at reducing disparities in educational, occupational, and other outcomes by, in essence, providing more youngsters access to the social environments (teachers, financial resources, etc.) of middle-class families. Being based on false expectations, such policy was bound to disappoint, as it has. But far from implying that we should "give up" on reducing socioeconomic disparities, the behavioral genetic evidence suggests that we need to rethink strategy. The first step, as Rowe makes clear, is to begin answering the following sorts of questions. How do "shared" environments exert their effect, and why does that effect vanish by early adulthood? Do the effects of the yet unstudied extremes of social advantage-disadvantage also disappear? What do the more enduring "non-shared" effects of environments (social and physical) consist of, and are they manipulable? Do temporary effects on intelligence have lasting effects on *other* attributes or options (social behavior, educational trajectory)?

Effects of (Genotypic and Phenotypic) Intelligence on Environments

Social scientists generally assume that environments affect intelligence, but they have usually ignored the possibility that intelligence shapes the environments that individuals experience. However, behavioral genetics has revealed the effect of genotypes on social environments—the "nature of nurture." For example, brighter parents tend to create different environments (linguistic, economic, etc.) for their children than do less bright parents. Parental genes for higher IQ are thus experienced by their children via an environmental as well as genetic route. As suggested above, however, those superior environments may have no lasting effect on IQ (although they may on its correlates). Rowe discusses in depth the mistake that social scientists make in assuming, as most still do, that any correlation between family environments and IQ must be entirely environmental in origin. Evidence now suggests that, by adulthood, the correlation between IQ and shared family environment may be almost entirely *genetic*.

The more interesting and unexpected effects of genotypes on environments may actually involve the children's, not the parents', genotypes for intelligence. Children are not simply passive creatures of their environments, but active, influential beings. Plomin and Petrill review evidence that about 40% of the variance in young siblings' family environments, as measured by the Home Observation for Measurement of Environments (HOME), is due to genetic differences among the *children* (siblings evoke different behavior from the same parents). As Rowe notes, behavioral geneticists speculate that the impact of family environments on intelligence largely dissipates by early adulthood because youngsters, as they gain more independence, begin to gravitate to and create for themselves environments—"niches"—that are better adapted to their genotypes, which in turn accentuate those genetic differences. Efforts to equalize outcomes by equalizing environments will always be somewhat frustrated by people's ability to choose, change, and differentially exploit their environments (and not always in favorable

ways). Rowe suggests that social scientists stop thinking of individuals as passive products of either their genes or their environments, and adopt behavioral genetics' "active organism" view of human behavior.

Gordon turns to the effect of phenotypic intelligence on environments. His concern here is not with how intelligence affects one's *own* behavior and outcomes, but how it shapes the social context experienced by *other* people and thus their behavior and opportunities. He illustrates concretely, for example, how the intelligence level of people in one's immediate social context can improve or reduce one's own odds of making consequential errors (committing a crime, getting AIDS). At the population level, the question Gordon raises is "how does the distribution of intelligence in communities or societies affect the ways in which those groups function, interact, evolve culturally, and thereby shape the lives of their members?" Lubinski and Humphreys implicitly address this question when they describe the "systemic" and "cascading" effects of intelligence.

Malleability of IQ and Social Progress

The accumulated behavioral genetic evidence reviewed here shows that differences in intelligence among individuals are both environmental and genetic in origin, but that the relative influence of these sources changes with age. The apparent responsiveness of intelligence to shared family environments in early childhood is only temporary. Much remains to be learned about environmental effects, shared and nonshared, and how malleable they are. It is clear, however, that a substantial amount of the variation in phenotypic intelligence is due to genetic diversity. Equalizing the quality of environments will not eliminate that diversity. The only way to reduce its social effects would be to give the best environments to the less favorable genotypes and to withhold them from the more favorable ones.

The search for a means to raise low intelligence should continue, but more attention might be turned to helping people make better use of the abilities they have. Gottfredson suggests that this shift in strategy may be critical for enhancing the employment prospects of low-IQ individuals, who are increasingly being left behind in the information age. Carroll makes much the same point in the context of education. In short, it may be more feasible to *improve* student or worker performance levels than to *equalize* them.

It must be noted, however, that an average rise in performance levels may either reduce or increase variation in performance depending on how that gain is obtained. If all students (or workers) gain equally, variance will remain unchanged; if bright individuals make better use of improved resources, differences will increase; if improvements target less able individuals, then performance differences may be reduced. These two goals of social policy—improvement (increased means) and equalization (reduced variance)—ought to be more clearly distinguished. They may collide more than coincide when outcomes are influenced by partially genetic traits such as intelligence.

Intelligence, whether phenotypic or genotypic, should not be expected to constrain the manipulation—the “malleability”—of *other* outcomes to the same degree. When the goal is to equalize outcomes, variation in intelligence is undoubtedly a bigger constraint when intelligence is more functionally important. For example, it can be expected to be a big constraint on changing variation in educational performance because educational success is strongly influenced by intelligence level. In contrast, the link between intelligence and income is much weaker, partly because it is heavily mediated by factors outside the individual's control (such as the setting of wage rates in different sectors of the economy). As the Gordon paper cautions, however, it is easy to underestimate the constraints imposed by enduring disparities in intelligence. On the other hand, it is equally mistaken to jump to the conclusion that the low malleability of intelligence dooms social progress.

The Role of Race and Demography

Differences in intelligence would be less vexing were there not stubborn group disparities in bell curves. Analyses of group disparities in IQ have focused in the past on the inequalities they create in outcomes such as education, occupation, and income. Rowe and Gordon address these issues as well. Gordon concludes that many of the most serious Black-White differences in well-being and pathology stem primarily from disparities in (phenotypic) intelligence, not from race *per se*. Many of our society's “race problems” (like its social class inequalities) actually arise from problems of intelligence. Rowe provides tentative evidence that the average Black-White IQ difference may be partly genetic, although he notes the ambiguities and contradictions in the total pattern of evidence.

In both cases, these findings are by-products of the authors' demonstrating new analytical tools for investigating the roots and consequences of differences in intelligence. Gordon's population-IQ-outcome model capitalizes on the fact that races are fairly distinct populations with (different) stable bell curves, which allows research to be conducted on the population-level manifestations of intelligence without always having to measure the IQ of individuals. Rowe demonstrates a method, using structural equation modeling, for determining whether distinctive group-level (e.g., race- or sex-specific) influences exist which alter the nature of developmental processes for one group but not another. Such group-contingent influences are often postulated but not demonstrated.

Lubinski and Humphreys argue that social scientists often seize too quickly upon demographic membership as an explanatory variable, thus curtailing the search for causes. They illustrate how demographic categories like race can be used as a tool in searching for the specific behaviors and circumstances that put individuals at risk, much as epidemiologists investigated the particular behaviors associated with homosexuality to determine what actually puts people at risk for AIDS, whether they be homosexual or not.

Societal Reactions to Evidence on Intelligence

A theme running through all the papers, at least implicitly, is that social scientists and policy makers tend conspicuously to ignore what amounts to an obvious mountain of evidence on intelligence. The avoidance is as well established as the findings ignored. The papers both by Rowe and by Lubinski and Humphreys speak of the chronic “neglect” of evidence on intelligence, and the latter discusses the “self-suppression” by which social scientists restrict what they learn and report. Gottfredson, in the text accompanying the editorial, reviews how IQ experts have sometimes been complicit in walling off evidence from public view.

There is a widespread perception, both inside and outside the field of intelligence, that certain truths are best left unacknowledged publicly—that there are “useful lies.” The authors in this volume have collectively demonstrated, however, that falsehoods about intelligence can be very destructive, especially when enacted in social policy. The well-being of society and its members, especially its least able ones, requires that we attend more constructively to intelligence and its effects. As Lubinski and Humphreys put it, it is “malpractice” to do otherwise.

The avoidant, fearful attitude toward public awareness of knowledge on intelligence, which is found mostly among the intellectually advantaged, is itself a phenomenon worthy of study. In Gordon's terms, it is among the second-order effects of the United States' particular distribution of intelligence in combination with its democratic nature and racial politics. Unfortunately, that collective attitude of avoidance and denial blocks the reflection which is needed to ameliorate the very social divisions that the attitude seems meant to avoid but is actually aggravating. Fears are greatly exaggerated and many opportunities overlooked.

CONCLUSION

This journal issue has focused on what *is*, not what *should be*, but it has also tried to encourage more informed thinking about what *could be*. In so doing, it has identified general approaches to social policy that are likely to be ineffective or counterproductive because they ignore or defy some stubborn empirical realities concerning intelligence. It has also identified some glaring and unexpected gaps in our understanding of environmental influences.

While the volume thus reveals a narrower range of constructive policy options than typically thought available, it has also tried to show how knowledge of intelligence can be used to design better interventions where there is agreement on goals. To take just one example, Lubinski and Humphreys suggest how greater attention to the cognitive limitations of many patients may enable health providers to assist them better in managing their health.

Perhaps most importantly, the research on intelligence reveals that differences in intelligence impose choices or dilemmas that Americans, in particular, would

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